March 1961

The Office

Magazine of Management · Equipment · Methods

Glass Showcase
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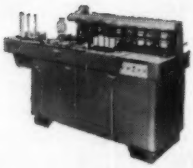

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The Office
Magazine of Management · Equipment · Methods

MARCH, 1961
VOL. 53, NO. 3

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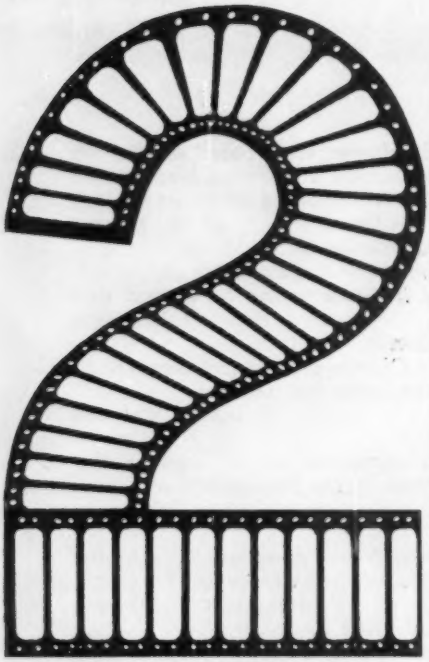

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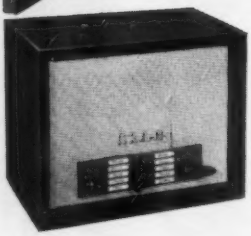

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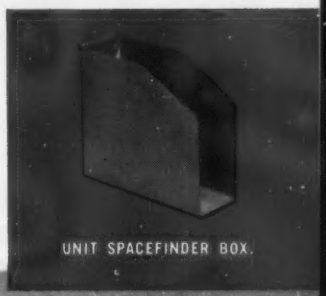

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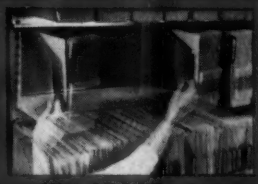

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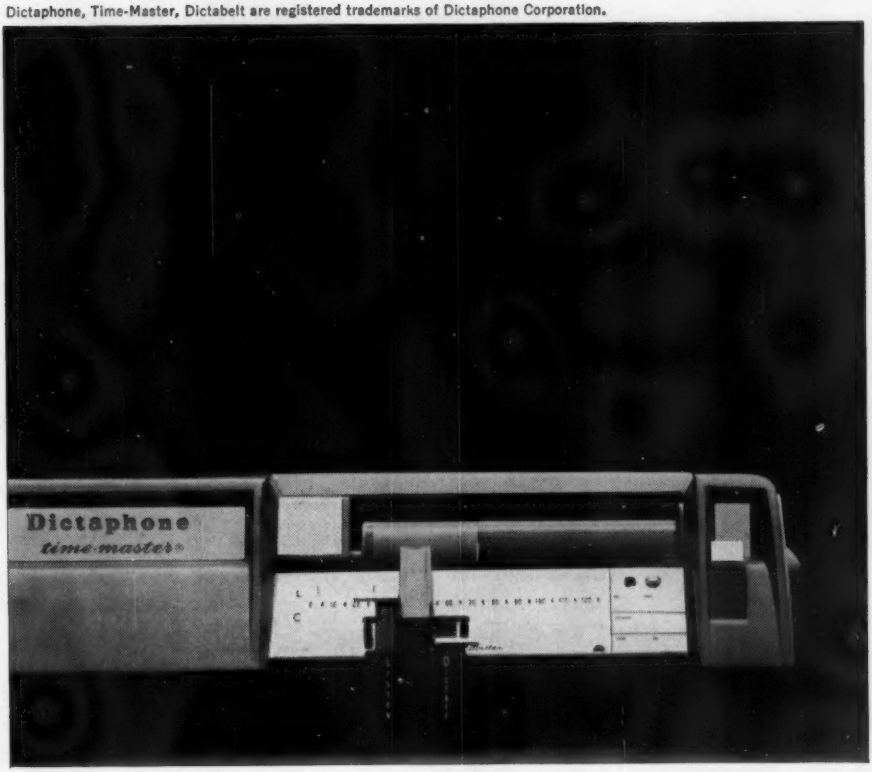

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Dictaphone Corp., 730 Third Ave., N.Y. 17, N.Y.; 204 Eglinton Ave. E., Toronto, Canada; 17-19 Stratford Pl., London W.1, England

For More Information Circle No. 341

Management May Be at Fault When an Employee "Goes Sour" On the Job

M. K. MORRIS, President,
Morris Business Engineering Service, Springfield, Mo.

WHEN AN EMPLOYEE "goes sour" on a job, with quantity or quality falling below production standards, management and not the employee may be at fault. But all too often, management applies the guillotine method to solve the problem, and the employee pays the full penalty. However, making the employee the scapegoat for management errors is a costly process. The expense involved in hiring and training a replacement, the high ratio of errors for the inexperienced employee, and the depressing effect upon the morale of the group are some of the major costs levied against the firm.

Who is to blame when an employee goes sour on the job? It may not be his fault. The trust imposed upon a supervisor requires a thorough investigation to determine the actual causes and the correct solutions. Only when this is done will the supervisor fulfill his responsibility to the company and to his employees.

What conditions in a company, over which the employee has little or no control, may be responsible for him going sour? Consider these four areas where management may be at fault:

Selection of the Man. The genesis of many an employee problem may be a poor selection process. A pleasing personality, a fast worker, a recent addition to the staff, an employee "with a little time," or some other unrelated factor may be the criterion used by management in selecting and assigning a worker to a job vacancy. There is risk involved, it is true, in any method used for selection of employees, but there are much better methods than personal bias or preference. Proper selection methods will minimize the risks.

The first step toward a good selection system is establishment of clear-cut definitions for all jobs, including the abilities an applicant needs to perform the tasks of the *immediate* job to management's satisfaction. But a wise

Job Specification			
Title: Circulation File Clerk			Page: 1
Alternate Title: Filing Clerk		Dictionary Code: 1-17.02	
Firm or Govt Unit: Standard Publishing Company, Inc.			
Dept: Subscription Fulfillment	Section: Circulation Files	Date: November 1, 1959	

SUMMARY OF DUTIES	Primary purpose of job: Sorts Speedaumat plates, in-files & out-files plates, and maintains circulation files. Plate handling: Directly responsible for circulation files. Must purge duplicate plates and check complaints against file data. Reports & records: Must maintain daily production record. Special reports may be assigned by management.
RESPONSIBLE TO	Subscription Fulfillment Manager.
RESPONSIBILITY FOR:	
(1) Error	Statistical likehood of error limited to misfiling of plates or failure to find plate in file. Dollar loss limited to cost of duplicate mailings or subscriber not receiving his copy on time.
(2) Equipment	Valuation approximately $5,000.00.
(3) Materials	High dollar valuation is placed on name and address plates. Labor cost of preparing plates approximately 40 to 50 times greater than cost of materials.
(4) Work of others	Does not supervise others or directly responsible for the work of others. Job calls for supplying information from the files for others in organization.
SKILL NEEDED:	
(1) Education	Average education a must. Knowledge of basic principles of filing needed.
(2) Experience	Very little needed to begin job.
(3) Initiative and ingenuity	Job largely routine under close supervision.

MORRIS BUSINESS ENGINEERING SERVICE

The first page of a three-page job specification form used by the author. Page two of form appears on reverse; page three of form is on page 15.

Job Specification	Title: Circulation File Clerk	Dictionary Code: 1-17.02	Page: 2

EFFORT:	
(1) Physical demand	Sitting most of the day. Lifting limited to relatively light tray of stencils or plates.
(2) Mental demand	Duties largely routine, but must compare name and address on receipt with name and address on plates, deciding if both are for the same person.
STANDARD PERFORMANCE	Sorting receipts: alphabetical at 400 per hour. geographical at 350 per hour. In-filing plates with out-plate-discs: 350 per hour.

Reverse side of form on page 13.

supervisor will not stop at this point when evaluating prospective applicants. He will consider the requirements of possible *future* jobs to which the employee would *normally* advance in time and with the development of job skills. Dead-end hiring (*i.e.*, selecting an employee with only the minimum requirements for the immediate job with no thought of future job requirements) can be costly to company and employee and, under certain circumstances, will contribute to the employee going sour.

Fig. 1 is a three-page form for enumerating the abilities and characteristics required for a particular job. Job specification data is invaluable to the selection of desirable employees.

The second step toward a good selection system is the use of proper tests to discover the potential of applicants. All testing methods must be used judiciously. Improper use of test results can inflict much damage upon employees. Any test or series of tests should be correlated with the known production capabilities of people performing work in the company.

Such questions as *What does this test actually measure? How consistently does the test measure this factor or factors? Is this factor actually needed by an applicant to satisfactorily fill the job?* should be answered before tests are used.

The third step toward good selection is the feed-back of data on actual employee performance and correlation with test results to determine how well the testing tools have functioned. Adjustments in selection technique will undoubtedly result from a realistic appraisal of this data.

Every business decision has an element of compromise, and the selection of the right man for a particular job is no exception. The astute, professional, well-disciplined supervisor will discard the irrelevant factors, carefully weighing those of importance before making his final selection.

Job Methods. The metamorphosis

Job Specification	Title	Dictionary Code	Page
	Circulation File Clerk	1-17.02	3

PHYSICAL ACTIVITIES				WORKING CONDITIONS			
	1. Walking		16. Throwing	X	31. Inside		46. Mechanical Hazards
	2. Jumping	X	17. Pushing light		32. Outside		47. Moving Objects
	3. Running	X	18. Pulling light		33. Hot		48. Cramped Quarters
	4. Balancing	X	19. Handling		34. Cold		49. High Places
	5. Climbing	X	20. Fingering		35. Sudden Temperature Changes		50. Exposure to Burns
	6. Crawling		21. Feeling		36. Humid		51. Electrical Hazards
	7. Standing		22. Talking		37. Dry		52. Explosives
	8. Turning		23. Hearing		38. Wet		53. Radiant Energy
	9. Stooping	X	24. Seeing		39. Dusty		54. Toxic Conditions
	10. Crouching		25. Color Vision		40. Dirty		55. Working with Others
	11. Kneeling		26. Depth Perception		41. Odors		56. Working Around Others
X	12. Sitting		27. Working Speed		42. Noisy	X	57. Working Alone
	13. Reaching		28.	X	43. Adequate Lighting		58.
X	14. Lifting limited		29.	X	44. Adequate Ventilation		59.
	15. Carrying		30.		45. Vibration		60.

WORKER CHARACTERISTICS

Amount: Not needed	Low	Average	High	Characteristics Required	Amount: Not needed	Low	Average	High	Characteristics Required
X				1. Working rapidly for long periods.		X			31. Initiative.
	X			2. Strength of hands		X			32. Understanding mechanical devices.
X				3. Strength of arms.	X				33. Attention to many items.
X				4. Strength of back.	X				34. Oral expression.
X				5. Strength of legs	X				35. Skill in written expression.
	X			6. Dexterity of fingers.	X				36. Tact in dealing with people.
	X			7. Dexterity of hands and arms.	X				37. Memory of names and persons.
X				8. Dexterity of foot and leg.			X		38. Personal appearance.
X				9. Eye-hand coordination.		X			39. Concentration amidst distractions
X				10. Foot-hand-eye coordination.			X		40. Emotional stability.
X				11. Coordination of both hands.	X				41. Work under hazardous conditions.
X				12. Estimate size of objects.	X				42. Estimate quality of objects.
X				13. Estimate quantity of objects.	X				43. Unpleasant physical conditions.
X				14. Perceive form of objects.	X				44. Color discrimination.
X				15. Estimate speed of moving objects.	X				45. Ability to meet and deal with public.
		X		16. Keenness of vision.	X				46. Height.
X				17. Keenness of hearing.	X				47. Weight.
X				18. Sense of smell.					48.
X				19. Sense of taste.					49.
X				20. Touch discrimination.					50.
X				21. Muscular discrimination.					51.
		X		22. Memory for details (things).					52.
	X			23. Memory for ideas (abstracts).					53.
	X			24. Memory for oral directions.					54.
			X	25. Memory for written directions.					55.
X				26. Arithmetic computation.					56.
		X		27. Intelligence.					57.
X				28. Adaptability.					58.
		X		29. Ability to make decisions.					59.
X				30. Ability to plan.					60.

MORRIS BUSINESS ENGINEERING SERVICE

The third page of the job specification form. When completely filled out, the form allows the supervisor to see exactly what a job entails, before measuring an applicant's ability.

Receive-Only
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Send-Receive
Floor Console

Table Model
Send-Receive Set

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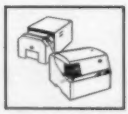
Tape Punch and Tape Reader



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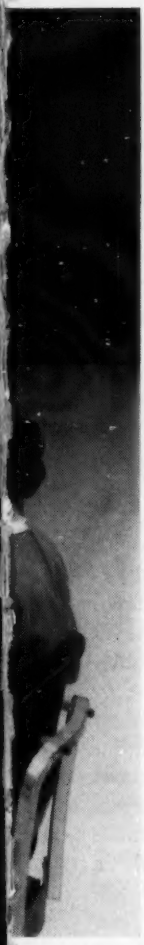

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of job methods is well-known to the management consultant. Deviations from the original approved procedures will occur in the best run offices. These deviations can cause a job to go sour, whether the changes in methods occur at the immediate work station or at some point in the processing prior to the point where the trouble appears.

Dehashing a job is a common procedure in a work simplification program. Because an employee "has a little time" and the new assignment "will take only a few hours," supervisors often add hash to an otherwise simplified job. "Precept upon precept, line upon line; here a little, there a little" and the poor employee eventually flounders under the tonnage of minutiae. In such cases, the supervisor, not the employee, is at fault.

Attritions and deletions from job methods may cause the immediate job to go sour, but an often overlooked cause may be changing the methods used on a job or jobs prior to the actual point of failure. For example, a supervisor striving to reduce the manhours required to prepare a report for top management and get it out on time, eliminated what appeared to be a time-consuming operation. But the report was even later than usual. An impartial investigation disclosed that the summation of the data for the report depended upon the apparent time-consuming operation that the supervisor eliminated. The summary work station was snowed under with more complicated procedures causing this job to sour. The cause was not in the job itself nor in the efficient employee doing the work, but in the unwise change in procedure of a job prior to the summation operation. The employee was not at fault for failing to meet the production deadline.

A job may turn sour because of an injudicious change in the sequence of operating methods. Some operations must precede others, some operations must follow, and some operations may be completed in any time sequence, without loss. The wise supervisor will carefully classify each operation before permitting a change, particularly if the operation to be changed depends upon a previous operation or is a prerequisite to a subsequent procedure. The cart-before-the-horse error is a common cause of a job turning sour which must be laid at the door of management.

Job Standards may be defined as the quantity of production employees should be able to complete at a stated quality level in a specified period of time, using standardized methods, materials and machines. While the use of standards is growing, the majority of companies do not have anything faintly resembling scientifically engineered standards for office work. Too often, if consideration has been given to standards for each job, these are only a mirage in the mind of the office administrator—and few employees can read minds! More likely than not, no thought is given to the quality and quantity an employee *should* produce on a job in a given time period so long as the required work is completed when management wants it. Mirage standards have a way of fading and changing according to the mood of the person, and are totally unreliable.

A job may turn sour if first one set

(Continued on page 274)

Seek Strength, Not Weakness In Appraisal Interviews

ROBERT HOPPOCK, Professor of Education, New York University

THERE ARE TWO conflicting theories of appraisal counseling. Most company programs are based upon the first of these: appraisal must precede counseling. This implies that the average employee is not fully aware of his own strengths and weaknesses, that his boss is in a better position to appraise his performance and tell him how to improve it, and if the boss tells him how, he will improve.

Human behavior is not always as simple as this. Subordinates do not always respond as we wish they would. Those who adopt this theory believe that it will work in enough cases to make the total program a profitable venture.

The conflicting theory may be simply stated: appraisal prevents effective counseling. This says quite positively that any appraisal puts a man on the defensive. A man on the defensive is in no mood to be counseled by the enemy.

David Mitchell once said "The chief characteristic of the human race is a sense of insecurity, and this goes from the top to the bottom." Most professional counselors agree that feelings of inferiority, insecurity and fear are common among men and women. Most of us do not confess such feelings. We think we should not have such feelings and that other people do not.

An insecure person may try to put up a good front, and appear to be accepting suggestions for improvement. But inside he may be feeling panic, thinking mainly about how he can conceal his other, undiscovered weaknesses. Most counselors believe that weakness can be effectively discussed only when the subordinate feels safe in talking freely. Not many feel this safe with their boss.

Can appraisal and counseling be effectively combined? Available evi-

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The function of the superior in appraisal counseling is to be a talent scout, not a repairman. A well-rounded man with no weaknesses is a myth. To develop the best men so that they will be ready for promotion, by emphasizing their strong points, is the superior's major job.

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QUESTIONS FOR USE IN APPRAISAL INTERVIEWS

1. As you see things around here, what do you think we do well?
2. Is there any way in which you think we could do a better job?
3. What problems do you think we have?
4. What do you think we ought to do about them?
5. What are ALL the things you have to do on your job?
6. Which of these take the most of your time?
7. Which seem to you to be the most important?
8. Does any of your work take more time than you think it should?
9. In what parts of your job do you feel that you are getting the best results?
10. What parts of your job are giving you the most trouble?
11. What do you regard as your greatest success, on or off the job?
12. Which of your abilities do you think contributed most to your success?
13. What kinds of satisfactions did you get from this experience?
14. What were some of your other successes? Repeat questions 12 and 13.
15. Do you see any way in which we could make better use of your abilities here on the job?
16. Is there any way in which you think we could make your work more satisfying to you?
17. Where do you hope to be ten years from now?
18. Have you been doing anything in the way of self-development?
19. Have you any plans for your own future development?
20. Do you need any help?

Basic questions for frequent use: How do YOU feel about it? What do YOU think we ought to do about it?

For second and subsequent annual interviews, revise questions, wherever necessary, so they apply to the past year rather than to all the past.

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dence is inadequate and inconclusive. Expert opinion is conflicting, maybe because of the false assumption that one theory can explain the actions of all men. Perhaps each theory is true for some men and not for others. Perhaps some men will accept criticism and act on it. Perhaps others will resent and reject it. Perhaps some feel secure only when they are appraised, while others feel secure only when they are not. Perhaps some managers can combine appraisal and counseling successfully, while others can never learn to do so.

There are counselors who believe

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that even punishment can be combined with effective counseling—if the counselor is an expert. Every disciplinary situation, every failure in performance, is a teaching opportunity—to a skillful teacher.

If each theory is true for some men and false for others, is there any way in which both theories can be used? By means of two simple modifications, companies now using the first theory can explore some of the possibilities in the second without sacrificing any of the essentials in their present programs. These modifications are:

1. Increasing use of self-appraisal.
2. Increasing emphasis on appraisal and discussion of what the man does well.

Many programs imply that the impetus for development must come from the superior. He makes the appraisal. He arranges the counseling interview. He persuades the employee to correct his faults. He checks up to see that the employee is following the development program agreed upon.

Undoubtedly there are men who will not move until they are pushed. Other men are sufficiently self-motivated to develop themselves. Between these two extremes are those who will submit to direction or exert their own initiative, depending on which type of behavior seems more appropriate in the circumstances. They will do either with a degree of enthusiasm that depends largely on how they are treated.

Some men are aware of their weaknesses and not unwilling to admit them. If the man himself says, "Here is where I ought to improve" the need to criticize is gone. The superior can become

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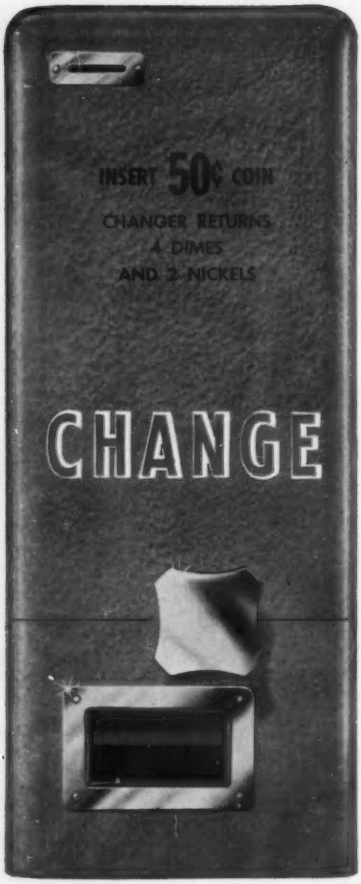

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For More Information Circle No. 346

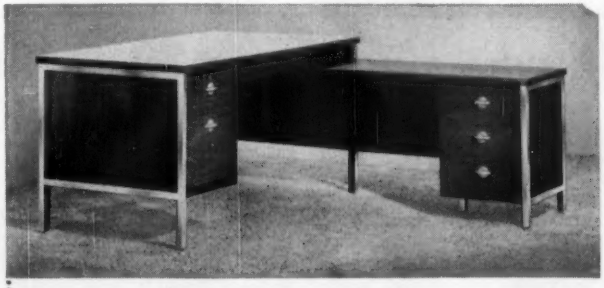
a helper instead of a critic.

Some men are already taking corrective action on their own initiative. Given an opportunity to report this, they do so proudly. Then instead of offering suggestions, the superior can compliment and encourage them on their initiative.

Some men know themselves better than their supervisors know them. They ought to! By the time a man reaches maturity he has had tens of thousands of opportunities to try all kinds of things, observing his success or failure, his superiority or inferiority to others. For 15 or 20 years he has been exposed to daily appraisal and counseling by his parents. For eight, 12 or 16 years he has received similar attention from his teachers.

Perhaps at graduation he feels "Now I am a man. I am no longer a child to be judged by others." If he does feel this way, he may be reassured and complimented and cooperative when his employer asks him to appraise himself. He may feel threatened and resentful when told that his boss will assume the role of parent or teacher and appraise him.

Given an opportunity for self-appraisal, some men will reveal weaknesses and failures unknown to their superiors, and will seek help in correcting them. Some will reveal abilities and interests not utilized in their present jobs, but potentially valuable to the company. For the administrative purposes of assignment, promotion and salary adjustment, appraisal by the superior can be useful, whether the subordinate agrees with it or not. For



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development purposes, appraisal is effective only to the extent that it is accepted by the subordinate and incorporated into his own appraisal of himself. Lacking this, the man may go through the suggested motions of development, but he will not develop. His attitude throughout will be resistance, resentment or resignation to futility.

The first step toward self-appraisal can be made simply by opening each appraisal interview with such questions as: "What do you think you do best? Is there anything you wish you could do better?" Some go further than this; they ask each employee to appraise himself on the same form that his superior uses, and to bring this to the interview. A few base appraisal interviews and individual development programs on self-appraisal alone.

A man can accept criticism from himself more readily than from anyone else. This is the great value of self-appraisal. To whatever extent the man recognizes and accepts his own weakness, to this extent it becomes unnecessary for his superior to criticize him.

Most appraisal and counseling programs imply not only a theory, but also an assumption which is seldom stated: the major purpose of appraisal and counseling is to discover weakness and correct it. As soon as this assumption is stated it is usually rejected. The response is, "Oh, no! We are just as eager to discover strength and develop it."

But look at company manuals on how to conduct the appraisal interview. Almost without exception they recommend that a few of the man's strong points be mentioned early in the inter-

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view, to make him more receptive to criticism. Manuals also recommend saving a few of the man's virtues until the end of the interview to soften the blow. Except for these two suggestions, there is little to be found on how the superior helps his subordinate to develop his strengths. In contrast, there are pages on how to lower the boom.

The most successful executives are not paragons of virtue who have corrected all their faults. They are strong men who succeed in spite of their faults. They surround themselves with other strong men who have other strengths to create, not a well-rounded man, but a well-balanced team. It is, therefore, more important to develop a man's strength than to correct his weaknesses.

The ideal of the well-rounded man, who has no weakness, is impossible to achieve. By setting our sights on it, we keep each man striving to do better the thing that he does least well. We waste his talents and sap his confidence. We make him a ripe prospect to be picked off by some competitor who appreciates his strengths.

An appraisal and counseling program can fail to correct a single weakness in a single employee and still be a lucrative investment for the company if it discovers a few top flight men who

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would otherwise escape attention, provides them with opportunities to develop their talents, encourages them to stay with the company instead of looking for greener pastures, and has these men ready for consideration when major executive jobs are to be filled.

To give more emphasis to strength, present programs may be revised in two ways:

1. By revising appraisal forms to give more emphasis and more space to such questions as: What does this man do well? In what ways is he superior to your other subordinates? What are his greatest assets? Where and how do you think these assets could be of most value to the company? What opportunities can you provide for him to develop these abilities? What other opportunities for development might the company provide?

2. By suggesting that executives in appraisal interviews let the subordinate do more talking. Ask them "What do you think you do best? What else do you think you can do well? Where do you think you can do the most to help the company to make a profit? Are you getting the kind of experience you need to make you more valuable to the company? Do you need any other kind of experience? Do you need any help from me or from anyone else?"

The function of the superior in appraisal and counseling is to be a talent scout, not a repair man. Correcting mistakes and strengthening weaknesses is done by every supervisor every day. It can well be left to him. To develop the best men so that they will be ready for promotion is the major function of appraisal and counseling.

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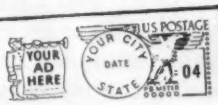

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For More Information Circle No. 447

Better Systems Arose Out of Earthquake Horror

CLARK L. SIMPSON, CPA,
Controller, Federal National Mortgage Assn., Washington, D. C.

Washington Daily News Photo

Crack in the main street of Puerto Montt. The earthquake in Chile last year destroyed 50,000 homes and business establishments. The American Red Cross conducted a nationwide appeal, provided funds, medical and other supplies.

LAST JUNE, devastating earthquakes struck vast areas in Chile, making millions homeless. In a demonstration of mercy almost unequalled in history, our country immediately rushed medical aid, clothing, food, shelter and supplies. It was midwinter in June and July in Chile, much to my surprise, when I was requested to lend a hand, on accounting and financial matters, to Chile's Governmental Housing Corp. (Corporación De La Vivienda).

With the destruction of thousands of houses, it was apparent that the snail-pace operations at which Corvi's finances and accounts had been carried in the past could not possibly keep up with the surge of activity which would necessarily follow. Therefore, machine accounting and tabulating equipment was an absolute necessity. Remington Rand's Santiago office cooperated fully in obtaining machines and accessories to expedite billings, collections and controls. They assisted in staff recruitment. They helped program the work flow and made my impossible assignment much easier.

Punched card machine operators habitually punched 100 cards and then two operators stopped their machines to manually check completed work. The department head maintained no record of work produced. Employees appeared to consume food, candy and beverages at all hours and a few gluttonous ones almost constantly. These habits were most difficult to overcome. But I did it and the division began to operate as of today instead of *mañana*.

Another difficulty I found at every turn was the abject manner in which employees bowed low when a supervisor spoke. When the corporation head asked whether certain work could

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A fireman looks for bodies in debris at the site of H. Mauk, office supply dealer in Valdivia, Chile, whose premises were wrecked by the quake.

be done with the tabulating equipment, the staff abandoned the accounting, billing and collection procedure and spent many days on this special work. I nearly blew my top when I learned what had happened especially when the machine room head said, "When a captain speaks, the sailor jumps to obey." "The hell he does," I said in poor Spanish, "if it runs the ship on a reef." I quickly took this matter up with corporation officials and eliminated, I hope

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for all time, such ridiculous interference in normal, required operations.

My report was most pithy, calling a spade a shovel on more than one occasion and pointing out inefficient political leeches holding jobs, not because of what they knew but because of whom they knew. I pointed out weak internal controls and recommended investigations which have since revealed cash shortages and resulted in dismissals and cash refunds. I laid the groundwork for an efficient financial and accounting system which will funnel into Chile's treasury several million escudos (each equal to a dollar) which were being withheld through careless and dilatory procedures. My work brought me in direct contact with Enrique Silva C., controller general, and Sergio Molina, national budget director, of Chile. Through them, my final report undoubtedly reached President Jorge Alessandri, a former professor at the University of Chile. Sr. Alessandri is an

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For More Information Circle No. 233

expert economist and undoubtedly my condemnation of this corporation's contributions to Chile's inflation gave impetus to the implementation of pertinent recommendations in the finished report.

On one occasion, I was asked to design a system for a national lottery to encourage building and loan savings and home construction. This was the most novel accounting or financial task I ever dreamed of—but the procedure I outlined was adopted.

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A factory destroyed by the earthquake in Corral, Chile.

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tion is now taken to bring about foreclosures and evictions for failure to make mortgage or rent payments. Such procedure was almost unheard of prior to my visit. Cashiers, treasurers and collectors are regularly audited now and opportunity for fraud has, to a great extent, been eliminated. The Internal Audit Division has been revitalized and some changes made in personnel and procedures. About 20 specific recommendations were contained in my report. Last fall, in a cable from the American Embassy at Santiago to the State Department in Washington, there was a request that I "pay a return visit to Chile in the spring of 1961."

Actually my report was described by the U. S. Mission in Chile as being "quite forthright and most critical." I personally feared it would be resented by the government of Chile and I am delighted that consideration is being given to a request for "more of the same."

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NEW Books

206 QUESTIONS AND ANSWERS FROM THE SEMINAR ON RECRUITING COLLEGE GRADUATES, 1960. Institute of Occupational Research, 104 Webster Ave., Manhasset, N. Y., 32 pp., $2.

Excerpts from tape recordings of a seminar in which experienced recruiters and college placement officers discussed how to determine manpower requirements; establish and maintain good college relations; make yourself unpopular on campus, appraise personality, drive and ability; the value of professors' comments on students; plant visits, who makes the offer and when, ratio of interviews and offers to acceptances, etc.

THE PERFECT SECRETARY by Lucy Graves Mayo. Eaton Paper Corp., Pittsfield, Mass., 32 pp., 25 cents.

A manual for secretaries and typists written by the former business communications director of Katherine Gibbs School. It covers a wide range of useful information including punctuation, correct letter salutations, technical "tricks of the trade," proofreading, and other subjects of interest to women in offices, such as personality and grooming. Quantity prices available for this booklet.

PRACTICAL BUSINESS PSYCHOLOGY by Douglas. A. Laird & Eleanor Laird. McGraw-Hill Book Co., 330 West 42nd St., New York 36, 442 pp., $5.75.

This third edition of a popular textbook for schools and industry training is of interest because its examples and applications deal mostly with white-collar work. The average person should find the book easier to read, understand and apply than

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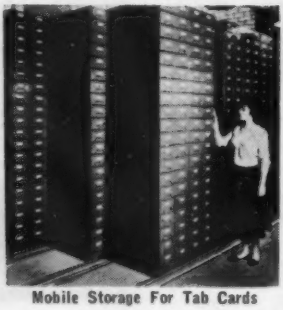

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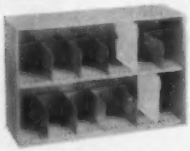

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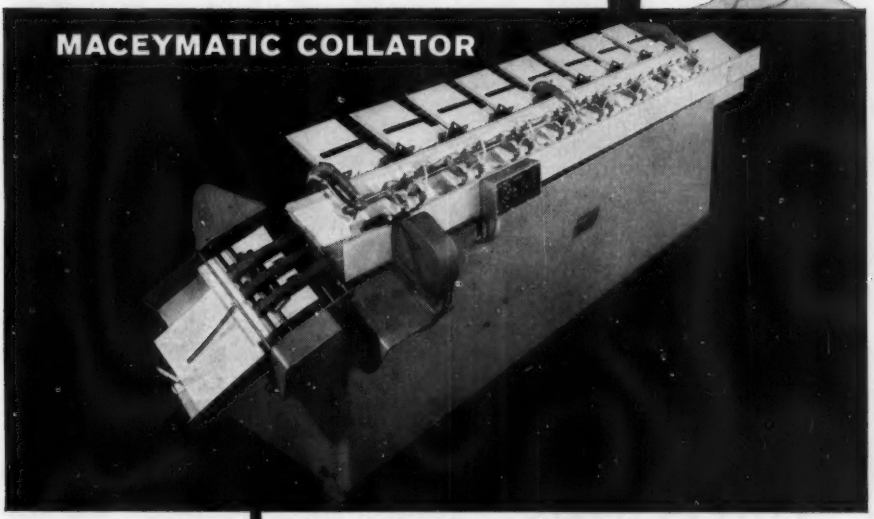

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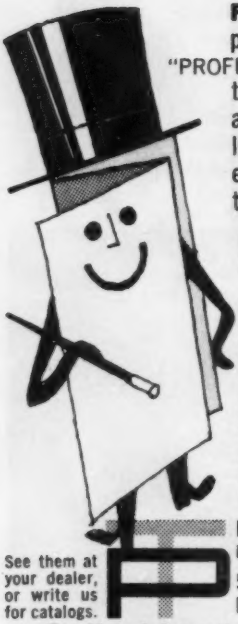

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most works on psychology. Any office supervisor, and those who aspire to be supervisors, could profit by reading it.

ENGINEERING DRAWINGS, SIZES & FORMATS, MIL-STD-2B. Government Printing Office, Washington 25, D. C., 14 pp., 20 cents.

Describes and depicts military standard 2B which establishes the sizes and minimum format requirements for the preparation of engineering drawings. Catalog No. D 7.10:2B.

CAREERS IN BUSINESS MANAGEMENT. Government Printing Office, Washington 25, D. C., 20 pp., 20 cents.

An overall view of different types of management positions, with emphasis on beginning jobs and ladders of advancement. Provides information on the kind of educational background required, nature of entry jobs, advancement opportunities, future employment prospects and related information. Catalog No. VA 1.19:22-7.

ARBITRATION OF LABOR DISPUTES by Clarence M. Updegraff. Bureau of National Affairs, Inc., 1231 24th St., Washington 7, D. C., 321 pp., $8.50.

Reflects the many important developments in labor since World War II in this revised edition. Combining a high level of research with careful explanation of arbitration procedures, the book serves as a practical and not-too-technical guide for laymen, as well as a useful reference for lawyers.

NOFA SALES MANUAL NUMBER TWO. National Office Furniture Assn., 327 S. LaSalle St., Chicago 4, 94 pp., $12.50.

A practical selling tool divided in two sections. The first deals with procedures to be used by salesman to motivate prospects. The strategy of selling office furniture is taken through five basic steps, and closes with a discussion of why people buy. The second section is devoted to a thorough, illustrated description of all types of office furnishings and their uses: metal and wood furniture, soft surface floor coverings, leather, vinyl fabrics, accessories. A special chapter is devoted to today's role of the office interior designer.

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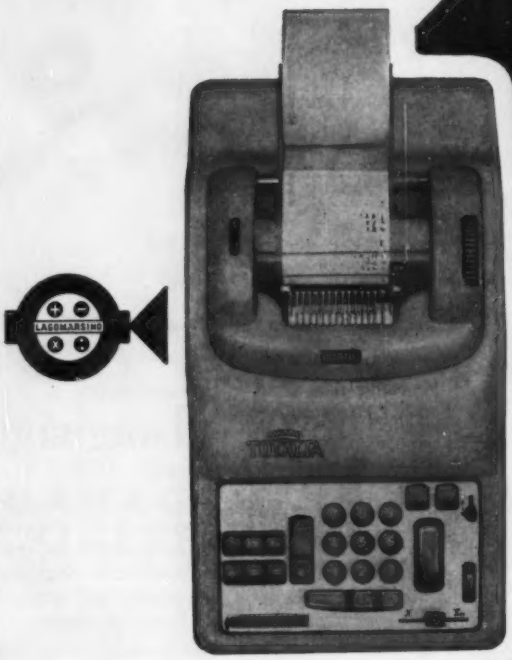
DIVISION

Mod. 8381



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HOUSTON, Adding Machines Distributing Co., 2223 Caroline St.
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50%

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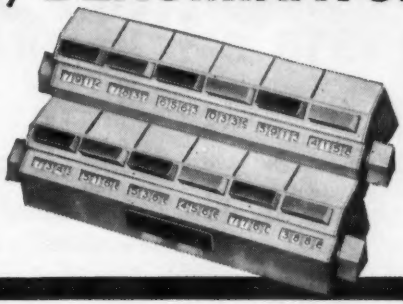

Sales analysis by item • Apparel sizing, questionnaire summaries, market surveys, etc. Food portion counting, summary of menu choices • Payroll denominating, when paying in cash • Control of residual quantities with reducing counters • Traffic movement surveys. Volume studies • Quality control, counts of faults or rejects • Publication surveys, research, circulation audits • Transit zone-fare audits • Zone-delivery control • Truckloading make-up.

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...that speed up the day's work

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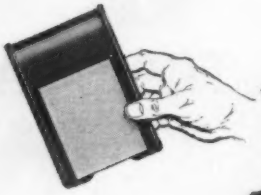

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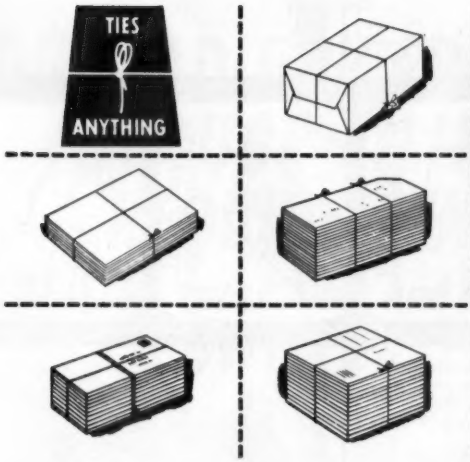

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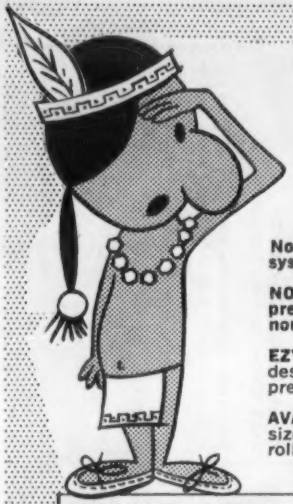

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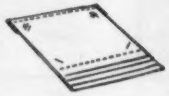

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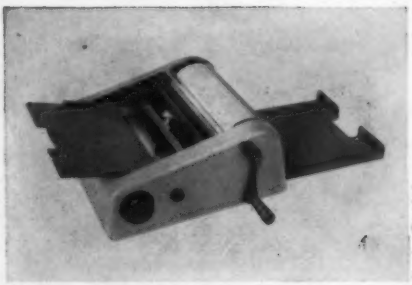

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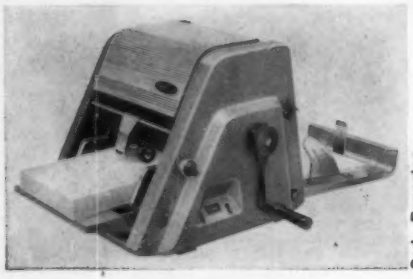
Sada Replic hand operated



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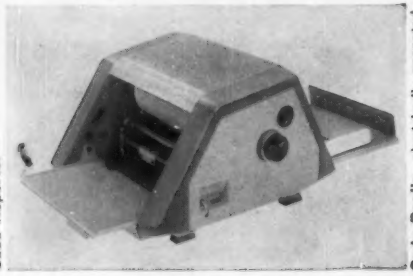

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Even non-experts can turn out uniformly fine impressions on every kind of stencil machine with Flagship Stencils. Especially easy to read, "balanced" for use on all typewriters, the cut-out, stretch resistant, long run performance of Flagship will class it as your finest stencil.

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LOOK HOW THIS NEW IDEA IN LETTER TRAYS STEPS UP OFFICE EFFICIENCY

The Bert M. Morris Co.

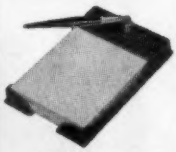
TWO-WAY TRAY

Greatest advance in letter trays in 20 years. Unique two-way design allows work to flow quickly and smoothly **both ways,** saving steps, increasing office efficiency.

Complements all types of office decor. Takes both letter and legal size paper. Stacks to any height with no cornerposts to interfere. Made of Hi-Impact plastic to eliminate breakage. Has non-marring polyethylene feet. Gray, desert tan, mist green. Retails at only $2.00 per tray for quick turnover (price includes four plastic posts).

Put efficiency at your fingertips with these other fine Bert M. Morris products . . .

MORRISHARP— Electric pencil sharpener.



MORRIS MEMO HOLDERS— With or without ball point pen.

MORRIS PHONE REST— In telephone colors. Fits all phones.

MORRISTAR BALL PEN DESK SET— Space age styling.

MORRIS TRAYS— Letter and legal size.

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For More Information Circle No. 349

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Are your salespeople creating a proper image of your company and product?

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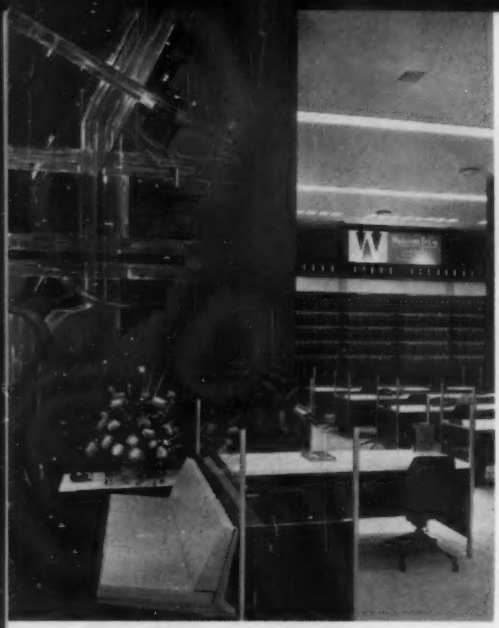
For More Information Circle No. 262

Camera!

Using General Electric's closed circuit television at City National Bank & Trust Co., Kansas City, Mo., records clerk (above) places ledger sheet and signature card under camera at request of teller at drive-in window (at right).

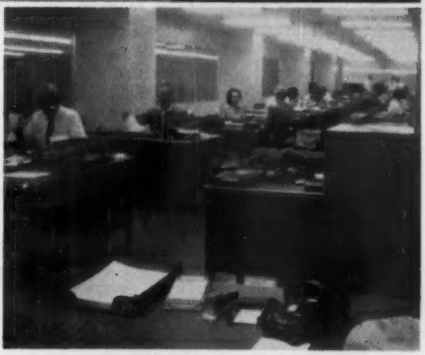
At Lytton Savings & Loan Assn., Hollywood, executives and tellers use a G-E closed circuit system to see records that are kept in a central vault.



Above is a view of the offices which were remodeled by L. G. Sherburne Associates, New York, for Walston & Co. in Los Angeles. An 11-ft. wide utility column in reception area (at left) has a mural inspired by the Freeway and executed by William E. Simpson.

New Los Angeles Brokerage Offices

Area in top-right photo as it is today. Customers sit at glass-partitioned desks; have privacy and can see stock prices on board. (See page opposite.)

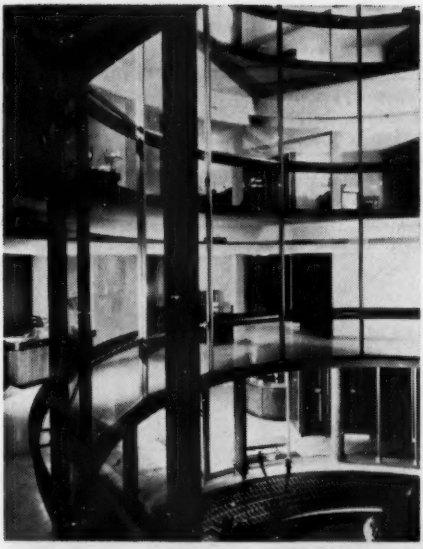


New mezzanine office area (above) once appeared as shown at right. Executive offices are at rear in above photo. All mezzanine offices overlook the customers' area and Teleregister board which are shown on the opposite page. Board can be seen by passers-by on Wilshire Blvd.

Grover pneumatic tubes bring orders from account executives to order room (below) which is also on mezzanine. Forms conveyor is by International Postal Supply Div. of Friden, Inc.

Standard Olivetti teletypewriters are used for remote computer inquiry at Lockheed Aircraft Corp., Burbank, Calif. System devised by Telautograph Corp. uses two teletypewriters alongside a Ramac 305 computer—one monitors incoming messages from distant offices and the other monitors computer's answers. Automatic selector scans network and activates remote transmitters, accepting one message from each station in rotation. A production man can type an inquiry and leave his machine. System will pick up his message when it can handle it and reply automatically.

Attractive patio outside this office has a translucent fence of Filon fiberglass reinforced plastic panels which afford privacy without darkening the offices.



Lawyers' Circular Office Building

Circular building designed by Polevitzky, Johnson & Associates for a Miami law firm's offices. Four floors of offices surround a center court (at left) which is roofed with a concrete and fiberglass dome that is open at the sides for air circulation. Textured screen shields offices from outside glare.

Tower at rear of building (at left) houses elevators, floor lobbies and balconies. Building also has a penthouse lounge and dining room.

Remington Rand Ltd. has completed this ten-story, glass-paneled office building in London, England. Designed to house the office equipment and business machine divisions, it has accommodations for 600 employees. The building is T-shaped, with ten-story and six-story sections at right angles. Ample parking is provided on the ground and in basement areas.

Benjamin W. Neuschaefer, head of the billing department at American Tag Co., Belleville, N. J., says 45% of their orders are exactly repeats. Tape punched with typing of initial order is fed to Flexowriter which automatically types repeat order and prepares new tapes for invoicing and sales statistics.

Mary Ann Barrett collects copies while Aline Ayotte operates a Peerless Quick Silver Photocopier in the documentation service section of the Nato Support Dept., Raytheon Missile Systems, Andover, Mass. Copies of documents and smaller engineering drawings are made immediately as each request is submitted.

The 35-story Lewis Tower Building, second largest office building in Philadelphia, has installed high efficiency, glare-free illuminating panels in conjunction with Owens-Corning Fiberglas acoustical ceilings. Uniform light distribution of high value provides offices such as these with comfortable, fatigue-free illumination.

Lt. Comdr. Michael A. C. Hume, USNR Supply Corps, New York management consultant, recently completed a two-week tour of duty in the Bureau of Supplies & Accounts, Washington, which included a review of the Navy's program for the application of electronic computers to advanced logistics problems. He claims the Bureau is applying techniques of inventory management far in advance of anything he knows in private business. Naomi Hagler, head programer, is at left.

Chicago Title & Trust Co. saves valuable space by storing semi-dead records in Staxon-steel transfer files made by Bankers Box Co. Self-stacking, the files can be arranged to any height with their own steel framework. No space is lost between units.

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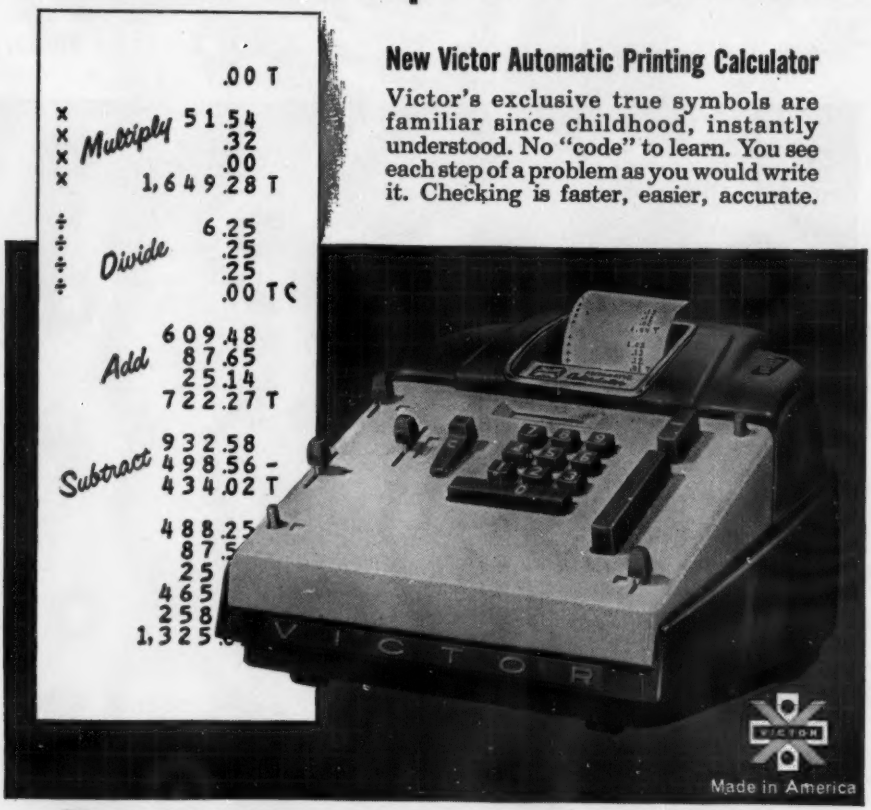

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Easy to use as an adding machine

No special training needed! With just one simple keyboard, Victor's Magic Motor Bar and Simpla-Key handle all transactions. Automatic Constant. Total Transfer. Credit Balance.

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Here is the machine that gives you...
Developer cartridge loading • No mixing, no pouring • You never see the liquid • Triple life to photocopy developer • Plug-in convenience • The finest photographic prints ever • Uniform copies every time

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All you do is place the sealed developer cartridge in the PHOTORAPID ELECTRAMATIC, turn it on, and start photocopying. Turn it off and the developer automatically flows back into the cartridge. No mess, no fuss, no chemicals left out to slosh around and lose potency.

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The PHOTORAPID ELECTRAMATIC skips nothing—copies everything... ...permanently!

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For More Information Circle No. 236

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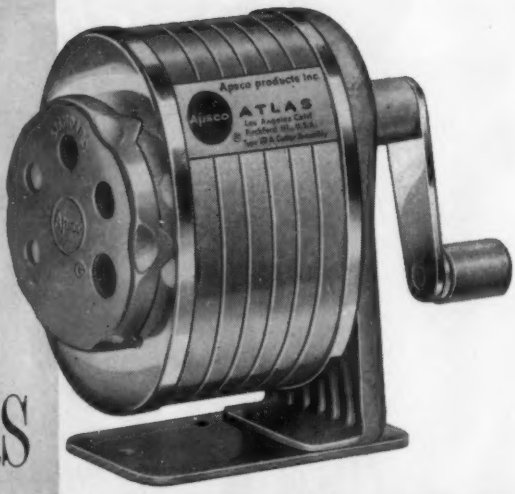
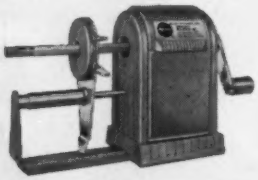


The Apsco "ATLAS" Pencil Sharpener

The Apsco "DEXTER"

The Apsco "DANDY"



The ATLAS, one of the complete line of Apsco Pencil Sharpeners, is one of the most popular models specified for general office use. Typical of all Apsco products, the ATLAS is a high-quality sharpener, yet is priced economically. Quality features include a positive stop, nylon dial selector, heavy-gauge welded all-steel frame, and long-life, replaceable cutterhead. Specify Apsco products for YOUR office – there are none better.

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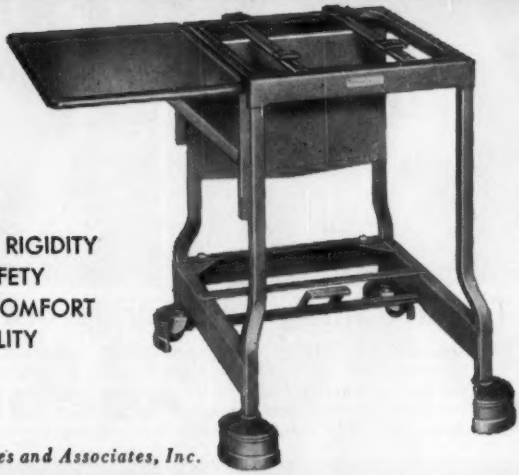
Design — Construction — Performance — Value



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MODEL
6000

New Concept In:

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- MACHINE SAFETY
- OPERATOR COMFORT
- RETRACT-A-BILITY
- PORTABILITY
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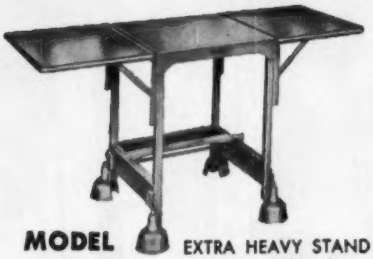
Design—Charles E. Jones and Associates, Inc.



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EXTRA HEAVY STAND for many types heavier, electrically operated, office machines. Square, tubular legs. Solid steel top, undercoated for sound-vibration abatement.

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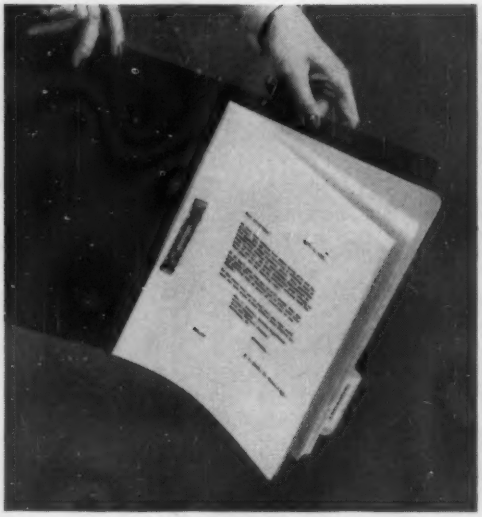

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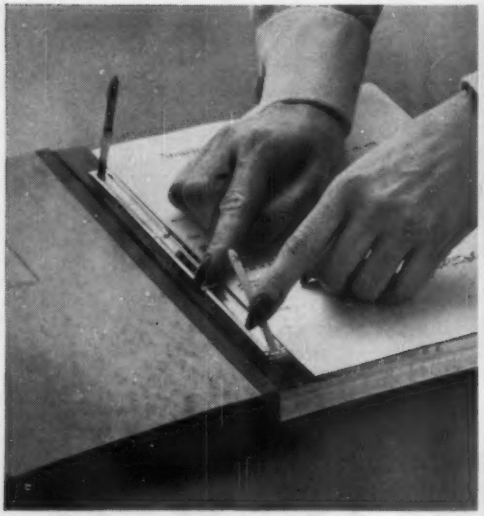

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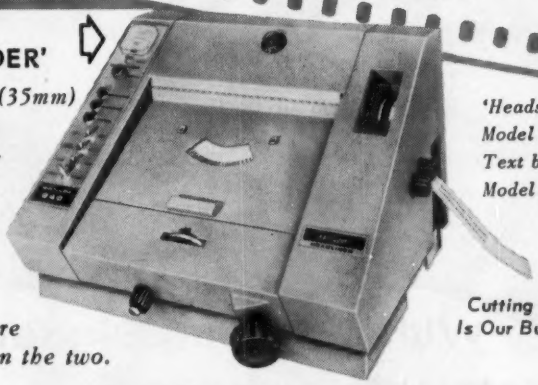

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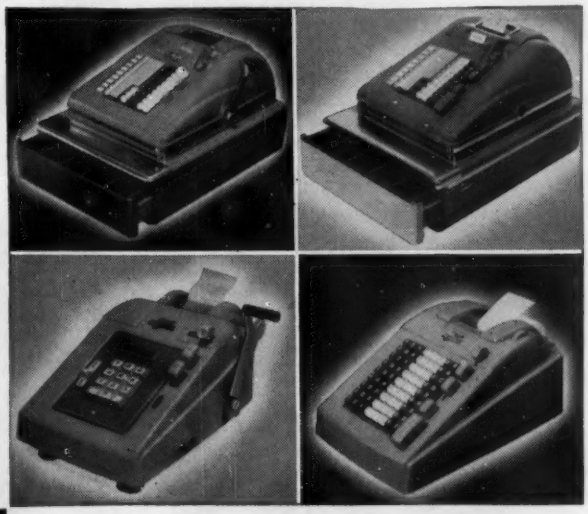

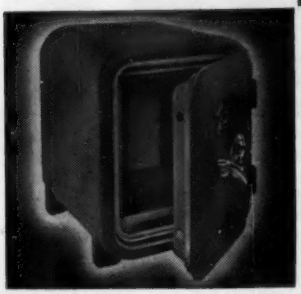

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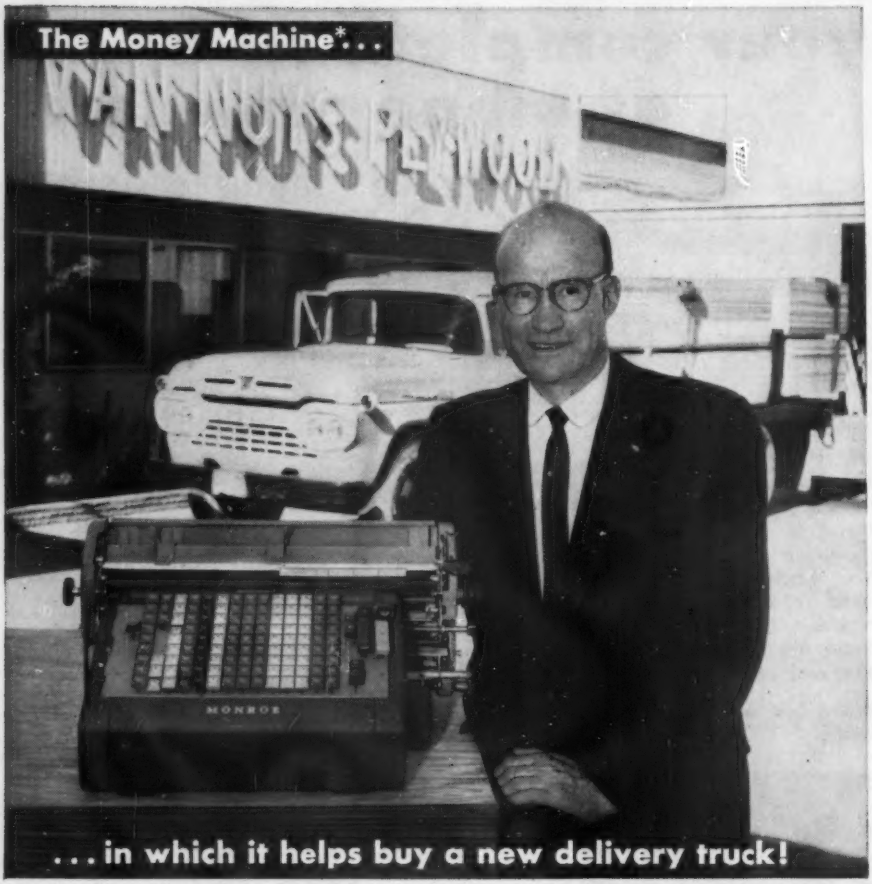

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Administrative Salary Survey

SALARIES for selected administrative, professional, technical and clerical occupations during the period Jan.-June, 1960, were surveyed in a broad range of representative private businesses in urban areas by personal visits of field economists of the Bureau of Labor Statistics and summarized in the *Monthly Labor Review**. Estimated employment in the occupations studied was about 1.1 million. Women accounted for half this number, largely in the clerical positions.

Definitions were established for different work levels within the occupations studied, in terms of duties and responsibilities, with Class I assigned to the lowest level. However, specific job factors varied from one occupation to another. Average (mean) weekly salaries among the 77 job categories studied ranged from $55.50 for Class I file clerks to $442 for Class VI attorneys.

The survey was not designed to permit showing salaries by region or industry. To eliminate the influence of differences in regional and industrial composition of employment, total employment within the scope of the survey in each job category level was used as a constant employment weight in computing averages. The west led in clerical and clerical supervisory salary levels. The north central region was a close second in clerical salaries and, along with the northeast, only slightly below the west in clerical supervisory pay. Draftsmen's salaries were highest in the north central area. In the other four occupational divisions, the northeast had the highest salary levels with the west second in three of the four divisions.

Salary levels were quite similar in manufacturing, transportation, communication, electric, gas and sanitary services industries. Average salaries for these industries were above those for all industries combined. Retail trade, finance, insurance and real estate had similar pay levels — usually somewhat lower than manufacturers and public utilities for administrative and professional workers, and considerably lower for clerical workers. In finance, insurance and real estate, lower salaries were partly offset by shorter work-weeks.

Pay rate systems sometimes differed among employee groups within the same company: employees covered by the Fair Labor Standards Act and those not covered; employees covered by a labor-management agreement and those not covered; employees on the general payroll and those on the management or confidential payroll. Establishments were classified according to the system used for the majority of employees reported on.

The clerical group was the only one in which formal single pay rates applied to workers in as many as 10% of the firms with formal rate policies. Informal policies (salaries determined on an individual basis) were much

* "Pay Levels for Professional and Other White-Collar Occupations" by Louis E. Badenhoop, *Monthly Labor Review*, Dec., 1960, p. 1284.

(Article continues on page 83. See tables on pages 80, 81, 82)

Table 1. Employment, average salaries and cash bonuses for selected occupations[1], winter 1959-60.

Occupation and class	Number of employees (thousands)	Average (mean) salaries [2]		Average weekly salaries [3]			Cash bonuses [4]		
		Annual	Monthly	Mean	Median	Middle range [3]	Percent of employees receiving cash bonuses	Average weekly salaries plus cash bonuses [5]	Percent added to salaries by cash bonuses [6]
Accounts and Auditors									
Accountants, I	13.7	$5,845	$486	$112	$110	$102-$122	25	$113	1.0
Accountants, II	18.5	6,903	574	132	129	118- 143	35	134	1.4
Accountants, III	14.9	8,302	690	159	155	136- 178	39	164	3.0
Accountants, IV	6.4	9,858	819	189	185	162- 208	32	196	3.5
Accountants, V	2.4	12,031	1,000	231	228	193- 259	22	238	3.1
Auditors, I	.8	4,980	414	96	93	85- 104	35	97	1.4
Auditors, II	4.1	6,062	504	116	113	101- 130	32	117	1.2
Auditors, III	4.3	7,648	636	147	143	127- 165	30	151	2.7
Auditors, IV	2.0	9,307	774	179	174	154- 198	29	182	1.9
Attorneys									
Attorneys, I	.4	5,978	497	115	106	91- 137	36	116	.4
Attorneys, II	1.4	7,299	607	140	136	120- 158	20	141	.6
Attorneys, III	2.9	9,980	829	192	181	150- 223	29	194	1.2
Attorneys, IV	1.3	13,297	1,105	255	246	202- 296	25	260	2.1
Attorneys, V	.6	20,173	1,677	387	362	298- 464	19	394	1.8
Attorneys, VI	.6	23,020	1,913	442	403	341- 536	19	460	3.6
Engineers and Scientists									
Chemists, I	3.9	5,529	460	106	105	97- 114	19	107	.5
Chemists, II	6.1	6,447	536	124	122	110- 135	41	126	1.9
Chemists, III	8.5	7,763	645	149	148	132- 165	37	152	1.8
Chemists, IV	5.7	9,496	789	182	179	161- 198	31	186	2.3
Chemists, V	3.4	10,993	914	211	208	188- 236	38	218	3.4
Chemists, VI	1.5	13,696	1,138	263	249	234- 288	43	276	4.8
Engineers, I	19.3	6,371	529	122	123	115- 130	16	123	.4
Engineers, II	43.1	7,241	602	139	137	127- 150	17	140	.6
Engineers, III	76.0	8,411	699	161	160	146- 176	16	162	.8
Engineers, IV	63.5	9,868	820	189	187	170- 206	19	191	1.0
Engineers, V	32.1	11,620	966	223	218	197- 245	22	227	1.8
Engineers, VI	12.7	14,193	1,180	272	264	235- 302	25	281	3.2

Mathematicians, I	.4	5,786	481	111	110	98- 122	11	111	.2
Mathematicians, II	.7	6,760	562	130	127	116- 141	14	131	.4
Mathematicians, III	.7	7,992	664	153	150	137- 167	11	153	.3
Mathematicians, IV	.5	9,115	758	175	172	156- 191	17	176	.6
Mathematicians, V	.4	11,788	980	226	233	203- 253	50	251	10.9
Mathematicians, VI	.2	14,193	1,180	272	257	232- 300	24	288	5.7
Mathematicians, VII	.1	15,054	1,251	289	269	238- 346	22	295	2.0
Directors, research and development	1.1	18,189	1,512	349	344	286- 395	35	380	8.7
PERSONNEL MANAGEMENT									
Job analysts, I	.2	5,946	494	114	106	99- 123	17	115	.5
Job analysts, II	.6	6,690	556	128	127	113- 143	16	129	.9
Job analysts, III	.9	7,388	614	142	140	126- 160	23	143	.8
Job analysts, IV	.6	9,354	777	180	179	161- 199	19	181	.6
Employment managers, I	2.4	6,668	554	128	125	108- 149	45	131	2.3
Employment managers, II	1.6	7,841	652	151	151	128- 168	27	154	2.0
Employment managers, III	.7	9,110	757	175	169	151- 193	19	179	2.1
Employment managers, IV	.1	11,680	971	224	212	192- 253	14	226	.9
Directors of personnel, I	1.0	7,921	658	152	149	130- 168	42	156	2.5
Directors of personnel, II	4.1	9,484	788	182	179	156- 205	42	189	4.1
Directors of personnel, III	.9	13,141	1,092	252	243	206- 302	39	265	5.2
Directors of personnel, IV	.6	15,747	1,309	302	281	237- 361	38	328	8.7
CLERICAL SUPERVISORY									
Managers, office services, I	.8	7,251	603	139	140	123- 151	49	142	2.2
Managers, office services, II	.5	8,042	668	154	146	129- 181	18	156	1.0
Managers, office services, III	.4	9,399	781	180	179	148- 206	39	184	2.0
Managers, office services, IV	.1	11,356	944	218	213	169- 264	19	219	.3
Supervisors, keypunch, I	2.1	4,826	401	93	93	83- 102	32	94	1.4
Supervisors, keypunch, II	1.0	5,951	495	114	115	100- 124	21	115	.9
Supervisors, payroll	3.8	7,051	586	135	131	117- 151	30	137	1.3
Supervisors, tabulating-machine unit, I	5.3	5,956	495	114	115	101- 130	31	116	1.4
Supervisors, tabulating-machine unit, II	6.2	7,271	604	140	138	121- 157	38	142	1.6

[1] The study relates to establishments employing 100 or more workers in 188 Standard Metropolitan Statistical Areas in the United States (excluding Hawaii), as revised in 1959 by the Bureau of the Budget, in the following industries: manufacturing; transportation, communication, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; engineering and architectural services; and research, development, and testing laboratories.

[2] Salaries relate to standard salaries that are paid for standard work schedules. In tabulating the salary data, salaries reported on an annual or monthly basis were converted to weekly salaries by dividing by 52.1 or 4.33, respectively. Average annual and monthly salaries were then derived from average weekly salaries by using these same factors.

[3] The middle (interquartile) range is the central part of the array of employees by salary excluding the upper and lower fourths.

[4] Cash bonuses were averaged over all employees in each job category, including those who did not participate in such payments.

[5] Adjusted to include a small proportion of employees who received cash bonuses but for whom data on amount of bonus were not available, by assuming their bonuses equaled those for whom such data were available.

[6] Percentages were computed from weekly averages before rounding.

Table 2. Percentage distribution of firms[1] by salary rate systems[2], winter 1959-60

Type of salary rate system	Clerical	Clerical supervisory	Accountants and auditors	Personnel management	Attorneys	Draftsmen	Engineers and scientists
SALARY RATE SYSTEM							
Establishments with employees in occupational group:							
Number of establishments	30,027	11,033	16,143	9,044	2,576	8,529	11,212
Percent	100	100	100	100	100	100	100
Formal rate policy	38	41	33	39	42	55	37
Single rates	4	(3)	(3)	1	(3)	2	1
Range of rates (minimum and maximum rate specified)	34	41	33	38	42	53	36
No formal rate policy; salaries determined on an individual basis	62	59	67	61	58	44	63
FORMAL RATE RANGE PLANS							
Establishments with range of rates (minimum and maximum specified):							
Number of establishments	10,266	4,488	5,254	3,443	1,089	4,540	4,067
Percent	100	100	100	100	100	100	100
Intermediate rate policy:							
Intermediate dollar rates (step rates) specified	35	21	21	14	3	27	19
Intermediate dollar rates not specified but established policy for determining progression within range	43	59	59	70	77	55	64
Other policy	23	19	19	16	20	18	17
Progression policy:							
Automatic increases after specified period	11	3	1	(3)	(3)	3	1
Periodic merit review	72	83	85	90	88	77	85
Combination of automatic and merit increases	17	13	14	10	12	20	14

[1] See footnote 1, table 1.
[2] Salary rate system applicable to a majority of employees in jobs studied within selected job groups in each establishment.
[3] Less than 0.5 percent.

NOTE: Because of rounding, sums of percentages may not equal totals.

more prevalent in small firms. A majority of the companies that had formal pay plans with specified minimum and maximum rates, had flexible intermediate rates. Such rates were not specified for clerical workers in 43% of these firms; but were specified in 35% of all occupational groups.

For clerical workers, 72% of the establishments used periodic merit re-

(Continued from page 79)

view for salary advancement within rate ranges, and 11% of employers had provisions for automatic increases after specified periods. Among all firms with formal rate ranges applying to one or more occupational groups, 94% permitted hiring new employees above the minimum rate range. Tabulation of the results of the complete survey appears in the accompanying tables.

Table 3. Employment and average salaries for selected jobs,[1] winter 1959-60.

Occupation and class	Number of employees (thousands)	Average (mean) salaries [2]		Average weekly salaries [3]		
		Annual	Monthly	Mean	Median	Middle range [3]
Draftsmen						
Draftsmen, junior	27.9	$4,698	$390	$90.00	$89.00	$79.00–$101.00
Draftsmen, senior	50.2	6,252	520	120.00	118.00	105.00– 134.00
Draftsmen, leader	8.8	7,597	631	146.00	144.00	126.00– 164.00
Tracers	3.7	3,788	315	72.50	70.00	63.00– 81.00
Clerical						
Bookkeeping-machine operators, I	40.7	3,210	267	61.50	60.00	53.00– 69.00
Bookkeeping-machine operators, II	10.2	3,902	324	75.00	75.00	65.00– 86.00
Clerks, accounting, I	72.7	3,620	301	69.50	68.00	58.00– 79.00
Clerks, accounting, II	51.4	4,851	403	93.00	92.00	79.00– 106.00
Clerks, file, I	47.9	2,896	241	55.50	54.00	48.00– 62.00
Clerks, file, II	15.0	3,683	306	70.50	69.00	60.00– 80.00
Keypunch operators	49.2	3,655	304	70.00	69.00	60.00– 80.00
Office boys or girls	30.4	2,966	246	57.00	55.00	49.00– 63.00
Stenographers, general	111.8	3,898	324	75.00	74.00	64.00– 85.00
Stenographers, technical	8.7	4,413	367	84.50	84.00	77.00– 91.00
Switchboard operators	20.5	3,734	310	71.50	72.00	62.00– 83.00
Switchboard operators, special	1.3	4,078	339	78.50	77.00	71.00– 89.00
Tabulating-machine operators, I	10.9	3,679	306	70.50	70.00	61.00– 80.00
Tabulating-machine operators, II	19.8	4,415	367	84.50	85.00	75.00– 96.00
Tubulating-machine operators, III	9.1	5,277	439	101.50	101.00	91.00– 112.00
Typists, I	84.9	3,145	261	60.50	60.00	53.00– 67.00
Typists, II	48.8	3,751	312	72.00	71.00	63.00– 81.00

[1] See footnote 1, table 1. [2] See footnote 2, table 1. [3] See footnote 3, table 1.

Glass partition "borrows" daylight for this elevator lobby on an upper floor of new Libbey-Owens-Ford building, Toledo. (Exterior of building is shown on front cover.)

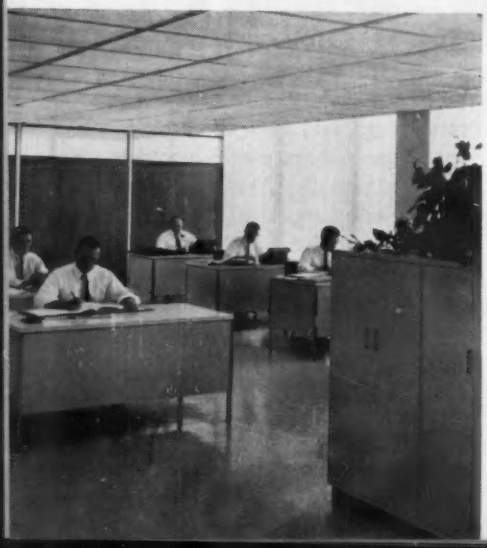
LOF Office Building Is Glass Showcase

GLASS is the salient ingredient in the new Libbey-Owens-Ford offices, first major office construction in Toledo in 30 years. "A glass showcase for a glassmaker," is how architects Skidmore, Owings & Merrill envisaged the project when assigned to design a corporate headquarters for the glass manufacturer. Until its move into the new building early last year, the company's head offices had always been in rented space.

The 120-sq. ft. structure is also a showcase for an increasingly popular type of office architecture—curtain wall construction. The term derives from the fact that the building's skin, like a curtain, is not load bearing. Instead, the entire weight of 15 stories is carried by the steel framework.

This type of architecture lent itself to the use of two of the company's own products: Thermopane and Vitrolux. The former is glass with hermetically sealed and built-in insulating air space; the latter, polished plate glass spandrels in fire-fused, sunfast ceramic color. Both offer natural resistance to weathering, crazing and checking. About 90% of the exterior of the building is glass.

Its advantages include speed and economy of erection, greater usage of floorspace, a pleasing appearance and reduced maintenance. In less than 18 months from the time ground was broken, LOF personnel moved into their new offices. As a comparison between conventional and thin-skin con-



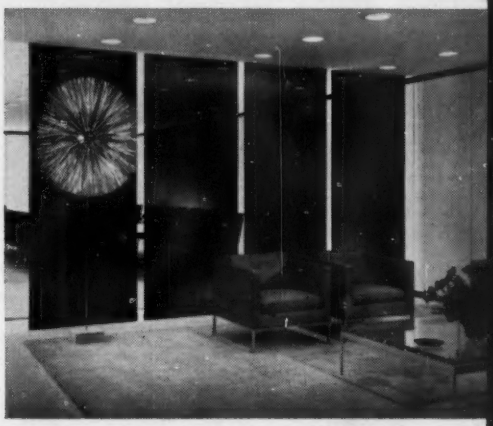
Cost analysis department has 6-ft. movable modular partitions of glass, plastic and teak.

White drafting tables were custom-made by Toledo Showcase Co.

struction, the architects point out that it required an average of 4¾ manhours to install a 5½ x 10-ft. unit of glass. To lay an equivalent area of 8″ brick wall requires about 12 man-hours.

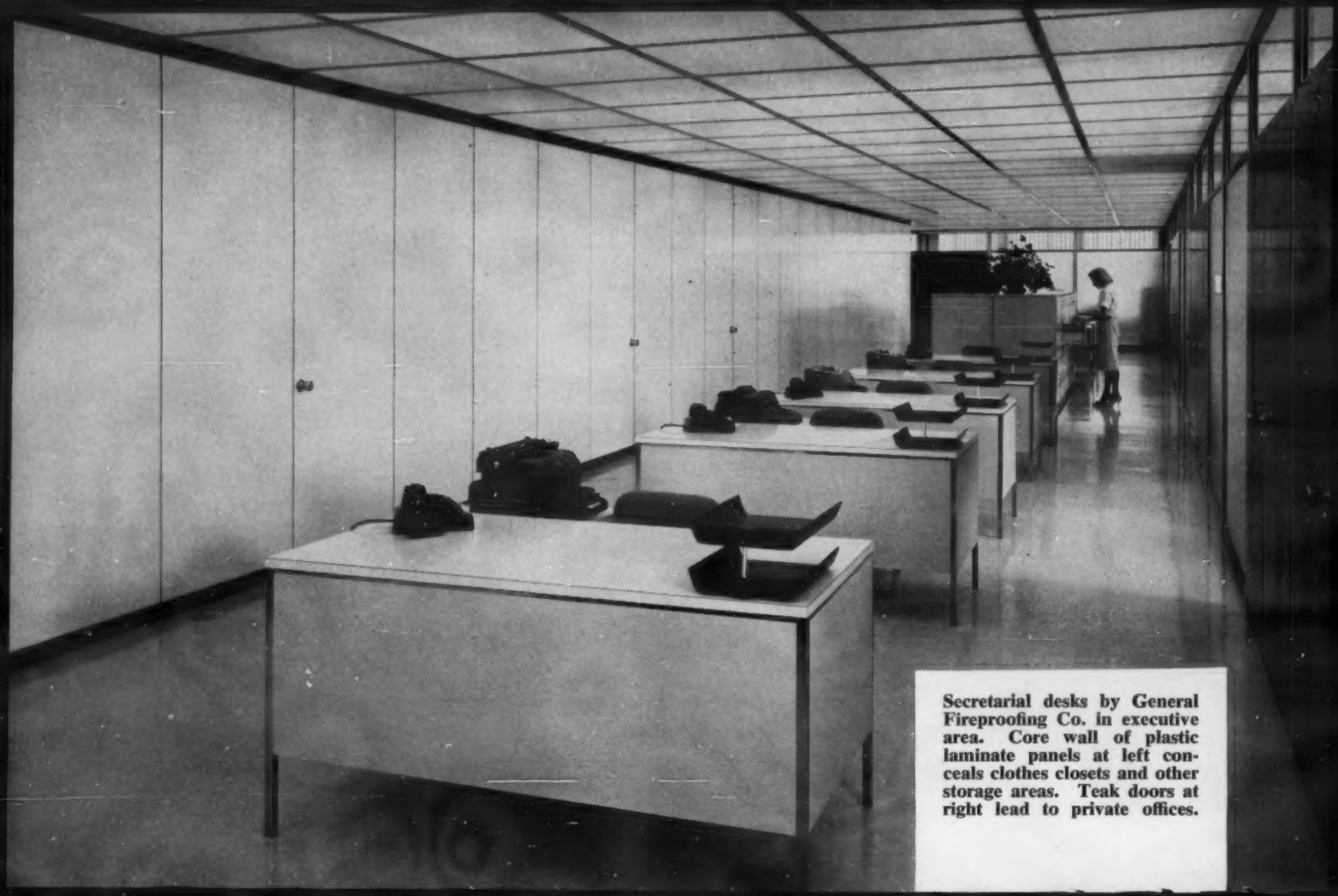
A few of the interesting facts about this new office building include:

- The 208-ft.-high edifice has a 77,-956 sq. ft. exterior wall area of glass.
- Window panels in the lobby are ½″ polished plate glass, 5½ ft. wide, 20 ft. high. The 1120 windows on other floors (80 to each floor) are Thermopane insulating units, 1″ thick with ½″ air space.
- There are some 2500 tons of steel



Lounge and conference areas of board room are divided by a handsome screen.

Reception area on seventh floor carries out monochromatic beige interior decor.



Secretarial desks by General Fireproofing Co. in executive area. Core wall of plastic laminate panels at left conceals clothes closets and other storage areas. Teak doors at right lead to private offices.

Tabulating machines are located in a separately air-conditioned area of the basement.

in the framework, and 27,418 tons of concrete in the foundations and the 75 caissons that support the building on solid bedrock 83 ft. below the surface of the ground.

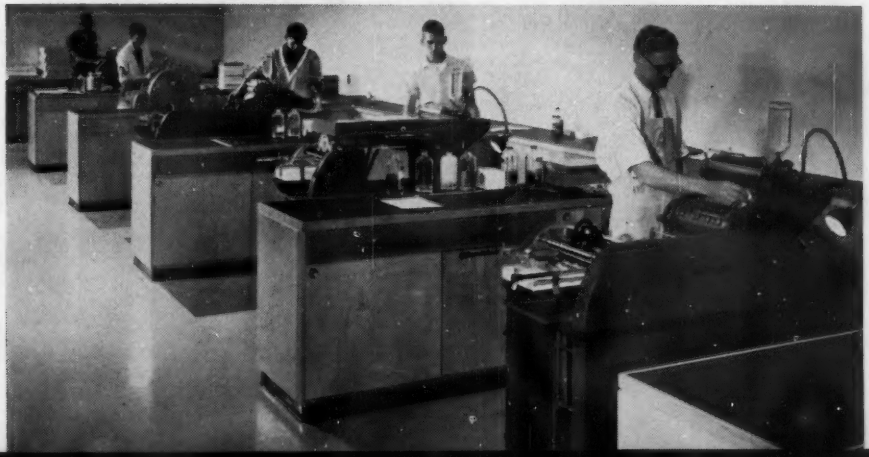
• Five 23-passenger elevators, coordinated by electronic control, offer fully automatic transportation between floors. They are the design and product of Haughton Elevator Co.

• The airconditioning system handles 200,000 cu. ft. of air a minute—equivalent to the needs of 100 average homes.

Other modern features incorporated into these offices include continuous luminous ceilings; uniform vertical blinds; movable partitions; vinyl floor coverings; motorized window washing equipment; and a snow melting system in the adjoining sidewalks.

It took over five months to complete the buying of office furniture and fixtures. Desks, storage cabinets, files, safes, chairs, sofas, tables, carpets, lounge furnishings, wastebaskets, pencil sharpeners and even the 300 ashtrays—all were bought new. More than 100 competitive bids were received on all items that could be purchased from more than one source. In awarding contracts, price alone was not the de-

Reproduction department showing Multilith and A. B. Dick offset duplicators which turn out price lists, sales bulletins, forms, etc.



cisive factor. Quality of workmanship and ability to meet delivery dates were equally important. In comparing the merits of the various manufacturers, the company buyers visited the Chicago Furniture Show to inspect their products first-hand.

Orders for approximately 5000 items were issued. These included 379 desks, over 1000 chairs and sofas, and hundreds of small items. The desks, designed by the architects and developed by General Fireproofing Co., are now standard in GF's line. Globe-Wernicke Co. supplied files; Mosler Safe Co., safes.

The company's mail—incoming, outgoing and interoffice—is handled by an automatic conveyor system. Riding a 200-ft. vertical shaft, plastic boxes of 25-lb. capacity are dispatched by placing them on a special loader and pressing the control button for the desired floor. The box is automatically loaded, transferred and then unloaded onto a receiving table. The conveyor travels at 72 fpm. and entire system is operated by a 3-hp motor that provides sufficient power to move six tons of paper an hour.

The building's interior lighting system is used for display purposes at night when the building becomes a glowing glass beacon. A 12-ft. band of ceiling lights around the perimeter of each floor is controlled by time switches to turn on automatically each evening regardless of the position in which any particular office light switch was left at closing time.

The company believes its new offices, containing as they do over 155,000 sq. ft. of glass, will give Toledoans something better than just a slogan to justify their claim to being the "Glass Capital of the World."

Central mailroom in the basement. Automatic conveyor system (at rear) distributes incoming, outgoing and interoffice mail.

How to Conduct A Statistical Survey

BENJAMIN J. MANDEL, Assistant Director, Educational Statistics Branch, Dept. of Health, Education & Welfare, Washington, D. C.

IN CONDUCTING a statistical survey, the first essential is to establish the basic objectives, in broad and specific terminology. This is known as defining the universe of inquiry and stating the objective. It can be done by spelling out the universe of interest and specific types of data needed for the purpose. Often the questions to be asked in the survey will define the universe of inquiry.

The second step is to plan and organize the survey. This includes: (1) specifying the required tabulations; (2) planning the content of the questionnaire; (3) deciding the size of the sample; (4) choosing the method of sampling; (5) establishing the necessary controls over the sample selection; (6) selecting the estimating formula; (7) selecting the sampling error formula. Once this has been done you are ready for the third and fourth steps: collecting and tabulating the required data.

The fifth step is the analysis of the sample results as follows: (1) the magnitude of the non-sampling error is evaluated; (2) the estimate is prepared; (3) the sample error is measured; (4) the risk in decision-making is stated. Finally the results of the survey are presented, along with the appropriate recommendations, to management for decision-making.

As an example, let's look at a recent sample survey conducted by the U. S. Civil Service Commission to provide an estimate of the number of federal civilian employees who did not have social security account numbers. The Commission wanted this information to judge the feasibility of issuing numbers to the relatively few who did not have them.

The questions to be answered were: (1) How many federal civilian employees have (and don't have) social security account numbers? (2) Of those persons claiming to have been issued a number, how many can (and cannot) actually produce this number? (3) Of those who produce the number, how many did so by copying it from their

THE SIX STEPS IN MAKING A

STEP	DESCRIPTION	CONCEPT INVOLVED
1	Define the universe and state objectives.	Universe of inquiry.
2	Plan and organize the survey:	
	a. Specify required tabulations;	Table formats.
	b. Plan questionnaire content;	Questionnaire.
	c. Decide on sample size;	Percentage size vs. numeric size.
	d. Choose method of sampling;	Judgment vs. probability sampling. Systematic sampling. Sampling rate. Random start. Oversampling.
	e. Establish controls over sample selection;	
	f. Select estimating formula;	Ratio estimate. Unbiased estimate.
	g. Select sampling error formula.	Standard error of a percentage.

social security card, from a written record, or from memory? (4) Of those who relied upon memory or used a written record, such as a copy of an income tax form, were these numbers accurate? (If the numbers were accurate they could be accepted without further screening.) These questions automatically defined the universe of inquiry and established the basic objectives of the survey.

When a probability sample is used, the proper statistical formulas will provide us with the approximate size of the

STATISTICAL SAMPLE SURVEY

STEP	DESCRIPTION	CONCEPT INVOLVED
3	Collect the data.	
4	Tabulate required data.	
5	Analyze the sample results:	
	a. Evaluate magnitude of non-sampling error;	Nonsampling error. Nonresponse. Undeliverables.
	b. Prepare the estimate;	Estimation. Point-estimate. Interval estimate.
	c. Measure sampling error;	Standard error of a percentage.
	d. State risk in decision-making.	Probability of exceeding sampling error.
6	Present final results with recommendations.	Confidence in results.

sample needed to meet specified levels of accuracy and confidence. When the estimate sought is a percentage, the formula for determining the sample size required having an approximate value of the true percentage. This is not known and must be guessed. When the estimate is an average, an assumption is usually made about the amount of variation from the average.

In the above survey we assumed that a sample size of 20% of federal civilian employees did not have a social security account number and that 80% did. A reasonable assumption regarding the true percentage is essential before a required sample size can be determined. It also must be assumed that one can stand as much as (but not more than) a 2% error in the estimate derived, provided one is 99.7% confident that this error will not be exceeded.

Using the statistical formula for 99.7% confidence, one solves for n, the

required size of sample: n (sample size) =

$$\frac{\text{assumed proportion } (p) \times 1 - \text{assumed proportion } (1\text{-}p)}{(\text{tolerable error} \div 3)^2} = n = \frac{p(1\text{-}p)}{\left(\frac{\text{error}}{3}\right)^2} = \frac{(.2)\ (.8)}{\left(\frac{.02}{3}\right)^2}$$

Thus we determined that a sample of approximately 3600 employees should be questioned, provided we used a sampling method which was roughly equivalent to simple random sampling. The actual sample size decided upon was 4500-5000 to allow for reductions expected from non-response, undeliverable questionnaires and other losses.

Since there were about 2.4 million active federal civilian employees, it should be noted that this sample was only 0.2%. Yet it was considered of adequate size for the purpose. (It is important to remember that sample size is usually thought of in terms of units rather than percentage size.)

Because each employee's record was filed in a fixed place, we were able to use a systematic random sampling technique. This permitted selecting individual cases from the universe by systematically picking every kth folder in the file, where k, the sampling rate, was computed by dividing the number of items in the universe (N) by the number needed for the sample (n):

$$\frac{N}{n} = k.$$

The records we used contained files for 5,250,000 current and former employees in about 79,330 file drawers, each about half filled. The records were filed in two sections, one for 4,562,000 pre-1955 employees and the other for 688,000 post-1954 employees, in alphabetical order of surname. Since records for active and inactive employees were interfiled, this was solved by oversampling to allow for deletion of the inactives after the sample was selected. (This procedure does not violate the principle of probability.)

When the survey was conducted there were about 2.4 million persons on the federal civilian payroll. Therefore, about 46% of the total file of 5,250,000 could be expected to represent active employees. On this basis, and with the goal of 4500-5000 employees, we determined the sampling rate to be every 440th folder. We decided to select a total of 11,000-12,000 names of both active and inactive folders, deleting 6000-7000 inactives to yield our 4500-5000 effective sample.

The sample was selected separately from each section of the file—pre-1955 and post-1954 — and the identity of folders was retained separately. These steps were applied: first the employee record in 172nd place was to be selected, (a random start determined by use of random digits); then every 440th folder was to be chosen. Since this would have involved counting the entire file of 5¼ million folders, a simplified procedure based on the number of file drawers and spacing was developed: (1) For the pre-1955-group, the total number of folders (4,562,000) was divided by drawers (79,330) to give 57.5 folders per drawer. (2)

Since we wanted every 440th folder, we determined that the sampling rate in terms of drawers was 7.65 (440 ÷ 57.5). To avoid fractions we alternated between the 7th and 8th drawers. Thus, after our random 172nd folder was drawn, one was selected from the 7th drawer, the 15th, 22nd, etc. (3) Folders were selected sequentially, the first folder from the first case, second folder from the second, etc. Several persons were assigned to select samples as outlined above, with the task divided into appropriate segments.

Sampling from the post-1954 file was done by getting an estimate from file supervisors that there were 8.67 folders per drawer. We divided the 8.67 into 440 and obtained a sampling rate of between 50 and 51 drawers. After selecting the 172nd case we counted 50 drawers and picked the first folder, counted 51 drawers and picked the second folder, etc., reverting to the first drawer and continuing sequentially.

This produced a total of 4542 active and 7134 inactive employees. The inactive employee folders were dismissed and 4542 questionnaires were mailed out. At the cut-off point several months later, 3377 or 77% of those receiving questions had responded. Of these, 96% had and 4% did not have a social security account number; 5% did not respond and 18% were stamped by the Post Office "undeliverable."

If one wants to assume that both the undeliverable and nonrespondent cases combined would also split into 96% with, and 4% without, an estimate of 96,000 federal civilian employees without accounts could be derived by multiplying .04(p) by 2,390,000(N). (Since this is a single-figured estimate, it is called a "point estimate.") To make such an assumption, however, would leave the estimate subject to whims of judgment and guesswork rather than to objective criteria of statistical measurement. Therefore, proper statistical standards called for an evaluation of the nonresponse and undeliverable cases, to estimate the proportion without account numbers. This was accomplished by subsampling 41 (about 5%) of the 803 undeliverables and 133 (about 33%) of the 362 nonrespondents, and making special efforts to get replies from them. To date, results indicate that the proportion without account numbers is not much different from that shown by respondents in the sample.

Final estimates were developed from the combined results of the respondent, nonrespondent and undeliverable cases, rather than on the basis of assumptions regarding these groups. The estimated total without account numbers was derived as follows: (T) = percentage without numbers in the sample (p) times total number of federal civilian employees (N) or T = pN. Thus, 96,000 = (.04)(2,398,000).

An unbiased estimate can be made from the sample results provided the estimate represents the universe of inquiry. An unbiased estimate nonetheless may still be subject to large or small error, depending on the factors which affect the sampling error and/or other types of possible errors such as incorrect replies, incorrectly copied account numbers, errors in data processing, etc.

The size of the sampling error in

the estimate was computed by the formula for the standard error of a percentage estimated from a simple random sample. In this case, the sampling error in the percentage (of employees without account numbers) was computed by: Sampling error (σ_p) = square root of the fraction obtained by multiplying the percentage (p) by 1 minus the percentage (1-p) divided by the size of the sample (n) or,

$$\sigma_p = \sqrt{p\,(1-p)/n}.$$

The computations were as follows:

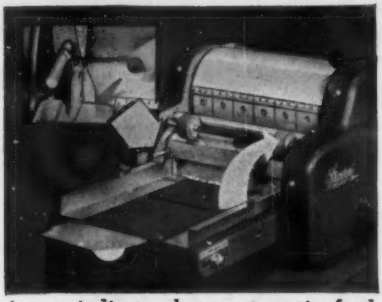
$$\sqrt{\frac{(.04)(.96)}{4542}} = \sqrt{.00000823} = .0029$$

The sampling error turned out to be less than 1% (.003 × 3 = .009), with a probability of 99.7% that this error magnitude would not be exceeded. Thus, the original goal of containing the sampling error within 2% was achieved.

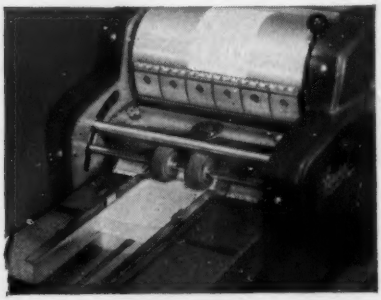
It was essential to evaluate the magnitude of the nonsampling errors in the sample, to determine their effect on the estimates. This type of error is illustrated by inaccuracies in the reported account number. A quality check on the accuracy of the account number reported on the questionnaire was made against the social security account number records by employees of the Bureau of Old-Age & Survivors Insurance. It indicated that, where memory was relied on, the account number given was correct in about 97% of the cases; where a record was referred to, the reported number was correct in about 98% of the cases. This was considered to be a satisfactory rate of accuracy and, therefore, the main source of nonsampling error in this survey was deemed negligible.

The sampling error in the estimated percentage of federal civilian employees who did not have an account number was computed to be no higher than 1% with a 99.7% probability that it would not be exceeded. This means that the single "point estimate" of 4% without account numbers may be as low as 3% or as high as 5%. When the low and high percentages are multiplied by the total of 2,390,000 federal civilian employees as of March 1960, the "point estimate" of 96,000 employees without account numbers becomes an "interval estimate" of 72,000-120,000. Because we have tolerated three standard errors (3 × .0029 = .0087), this interval estimate is called a 99.7% confidence interval; in other words, our confidence is 99.7% or 369 to 1 (99.73% ÷ 0.27) that the given interval of 72,000-120,000 contains the true number of employees without account numbers. Expressed differently, we are taking a risk of 0.27% or chances are 1 to 369 (0.27 ÷ 99.73) that the given interval will fail to include the true number.

The results of the study were presented in a report prepared by the staff of the Civil Service Commission to its executives. It contained the interval estimates based on the sample which answered the basic questions and indicated with a very high confidence (almost, certainty) that a very much smaller workload of account number issuances to federal civilian employees would be involved than originally anticipated.



Arrow indicates how automatic feed swings away for loading tray or for hand feeding. (Inset) Exclusive, self-leveling stripper pin with optional blades for positive feeding of paper or card stock.



Feed rollers slide together, center feed small forms, coupons, post cards, automatically. Segmented master clamp with blockout slot firmly grips all masters. Scale on drum and tray for positioning.

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For More Information Circle No. 200

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Call any Pitney-Bowes office for a demonstration. Or send for free illustrated booklet and case studies.

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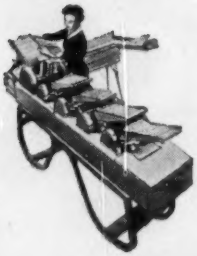

The larger 3100 Inserter can stuff up to six enclosures at once, at speeds up to 6,000 envelopes an hour. And can be attached to a PB postage meter machine to stamp and seal the stuffed envelopes.

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For More Information Circle No. 434

Mechanized Job Timekeeping Is Faster and More Accurate

ACCURATE COMPUTATION of labor costs is important in arriving at the price of a finished product, particularly when the product is being manufactured to order, *i.e.*, when it is a special item or assembly. General Machine Products Co., Trevose, Pa., which specializes in the production of special machinery, communications equipment, specialties and assemblies, each of which is unique, had the problem of charging labor costs against almost every product it manufactured.

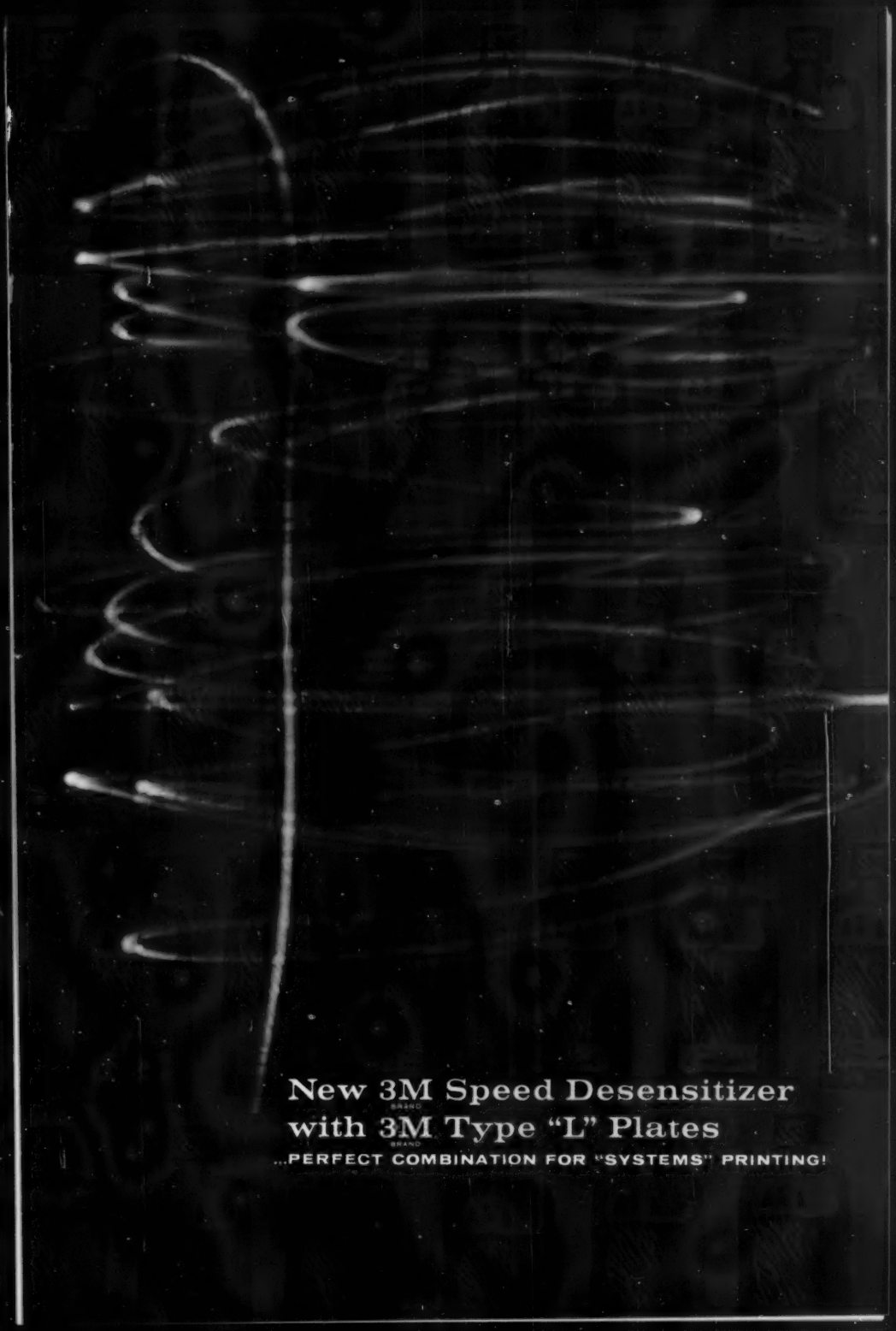
For many years, the company relied on time slips, manually filled out by each worker. At the end of each day, the worker would enter on his time slip the time he spent on each individual job. In the office, total hours as indicated by the individual slips were charged against the job, and the total labor cost arrived at.

All job shop orders are imprinted by a Calculagraph elapsed time computer at the start of each job. Machine automatically deducts all nonchargeable periods, gives only the elapsed time at end of job.

As labor costs became increasingly important, flaws began to appear in the system. It depended for accuracy on the estimates of the workers themselves. If a worker took too long on a particular operation, he might indicate a shorter time on another job. While the worker's time would be fully accounted for, the time charged against the individual jobs would be inaccurate. This did not provide the company with adequate knowledge about production time and individual worker performance. It was difficult to set precise work standards when time records were the result of worker interpretation.

Late last year, the company completely revised its time charging system by installing automatic Calculagraph elapsed time computers throughout its plant. The computers are programed to account only for the working schedule of the plant. Lunch periods, breaks, starting and stopping times are automatically deducted, so that only exact-to-the-minute time worked on each individual job is recorded. No manual entries are made on the time cards—only machine-verified figures are

For More Information Circle No. 475—>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pre-sensitized 3M Type "L" Plate in vacuum frame to step 6 on Gray Scale

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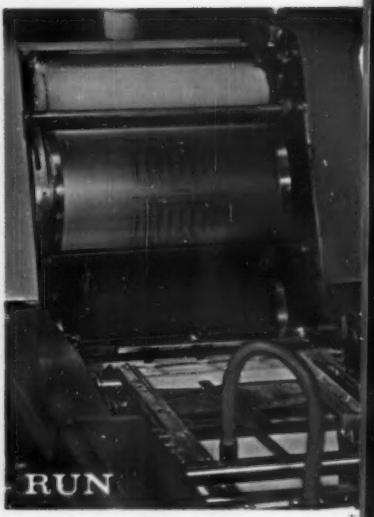

there's nothing like the Type "L" combination for speedy production.

Now you can ready a 3M Brand Type "L" Plate for the press almost as fast as you can say "3M Brand Type 'L' Speed Desensitizer"! This new colorless, stain-free chemical is so easy to use. It is wiped over the exposed Type "L" Plate . . . and the press is ready to roll. It can be done on the press without affecting ink train or dampening system and will not strip the rollers. This new 3M Desensitizer makes the Type "L" Plate even better and faster than ever! And remember, only 3M Brand Type "L" negative-acting Plates give you two usable, precision presensitized printing surfaces . . . both perfectly smooth aluminum . . . for cleaner-running jobs, for economy and quality.

Type "L" Plates now are in a handy flip type box sealed in a protective weatherproof wrapping.

MAIL THIS CARD TODAY for a demonstration in your own shop of the perfect combination for "systems" printing!

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imprinted by the elapsed time computer.

The system starts with the plant superintendent who sets up the production schedule on a chart with delivery date noted. He determines the particular jobs to be worked on during a given period, and the sequence of work on each job. The production schedule is then broken down and allocated to department heads in the plant, who issue numbered job shop order cards to individual workers. These pre-printed cards also carry employee's number and constitute the history of the job.

As soon as the worker receives a card, he inserts it in the Calculagraph in his department and presses a lever to imprint the starting time and calendar date of the operation he is to perform. When he completes his operation, he again inserts the card in the same Calculagraph which imprints the elapsed time. Any number of other workers in this department may insert any number of job tickets in any sequence. If a lunch or nonchargeable period has intervened, the computer automatically deducts this non-work period and prints only the time the man has been on the job. He then places the card in a box near the computer from which it is collected at the end of the day.

With this system, there is no need for the worker to consult the clock and make his own entry. There are three time computers in the plant, with boxes for completed cards. This eliminates worker traveling, and insures imprinting of exact time worked in accordance with the schedules of each department.

At the end of each day, the cards are collected from the boxes and taken to the office where they are broken down by category. After being sorted and totaled, job totals are entered in the shop order book. When the job is completed, management has on record the exact number of hours spent on it. This total is multiplied by the established job rate to arrive at the total labor cost.

The time computing system also gives the company fuller knowledge of its labor distribution in the plant. Each time computer is coded and analysis of the cards shows which employee worked in which department for how long. As there are different job rates in different departments, this affords a further cost breakdown. According to G. Nelson Pfundt, assistant treasurer, the system has cut clerical time in the office, tightened performance in the plant, and given the company the kind of machine-verified data it needs for labor cost analysis and individual job charging.

While job is in production, time and shop order cards are housed in visible rack next to the elapsed time computers located throughout the plant.

How Three Techniques Helped Admiral Sales Corp. Increase Printing Capacity 50%

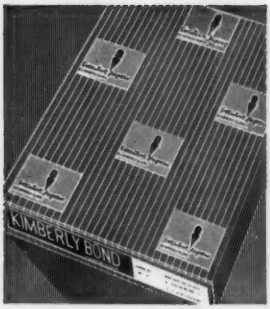
BERNARD HEINRICH, Manager, Administrative Services, Admiral Sales Corp., Chicago

AN EFFICIENT workload allocation system, offset equipment and facsimile master preparation techniques now enable our printing department to handle 50% more volume than previously. This three-pronged improvement in our printing operation gave us the capacity to produce about 18 million copies, both black and color, during 1959. These included everything from forms, letterheads, bulletins, pages of books, promotional literature, proposals, specification sheets, drawings, price lists and direct mail, to paperwork for our sales order-invoice, production order and engineering change order systems. We had one A. B. Dick Model 350 and two A. B. Dick large-image Model 360 offset machines. The addition of a third Model 360 last year increased our 1960 volume to 24 million copies.

The offset machines can be run with a minimum of effort and fatigue after a brief period of operator training. A fingertip lever in the Aquamatic moistening system gives the operator complete control in metering fountain solution to maintain ink-water balance. We produce quality halftones and fine linework for catalogs, product literature and other promotional material in both black and color. Self-adjusting cylinders permit us to switch from paper to card stocks and from paper to metal masters instantly. We have found this equipment generally more than pays for itself in the first month because of operating speed, shortened make-ready and clean-up time, ease of operation and maintenance.

One Model 360 is assigned to general duplicating of forms and other material in quantities of 500 to 5000. Another 360 produces general duplicating in quantities of 10,000 or more copies. The 350 is used to run general jobs calling for 15 to 500 copies and the third 360 duplicates nothing but systems work, varying from 15 to 100 copies.

This kind of workload allocation has two advantages. Machine operators become thoroughly familiar with the techniques required to run their particular jobs. For instance, the systems machine operator is adept at quick



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Executive Papers are properly pampered for perfect reproduction on office duplicating equipment. You can choose from cotton fiber, sulphite, coated and uncoated papers — the *right* paper for the job, accurately cut and ready to run. Attractive new wraps keep Executive Papers crisp and clean, right down to the last efficient sheet. Order (and re-order!) from your Kimberly-Clark distributor.

YOU MAKE BETTER BUSINESS IMPRESSIONS ON PAPERS BY KIMBERLY-CLARK

For More Information Circle No. 304

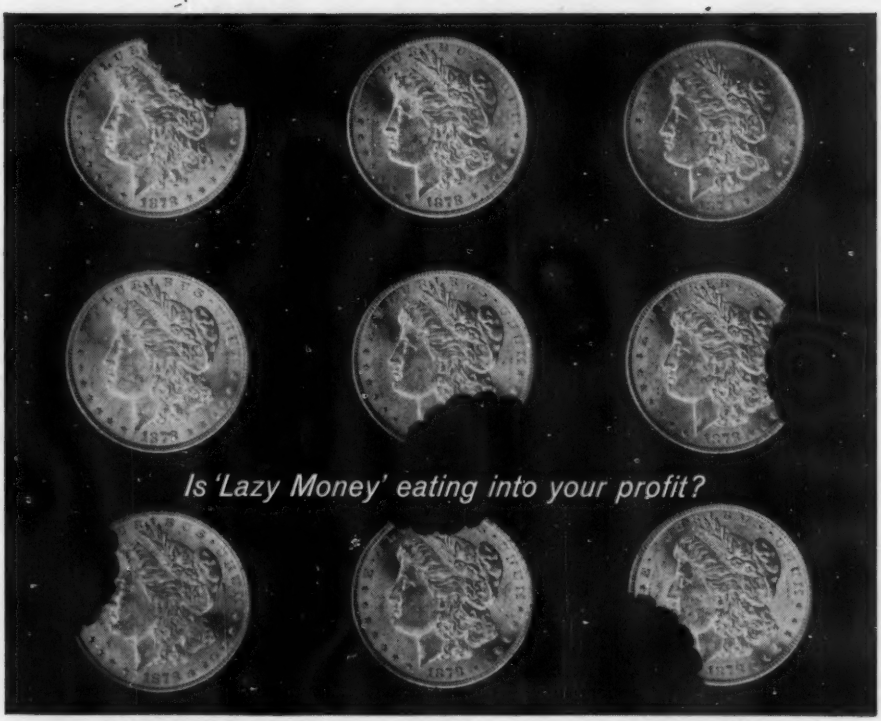
changeover of masters for short-run, repetitive work. Work scheduling is more efficient. Since we know exactly how much time it takes each machine to run the type of work assigned it, we can more easily schedule and direct to the machines a steady flow of work.

All paper masters, except those used to produce systems work, are imaged by a facsimile process, whereas formerly the majority of paper masters were typed. Imaging is done in an area immediately adjacent to the duplicating and collating operations. We can go from an original to a master in a few minutes.

Facsimile preparation of masters also permits copy changes quickly and easily. Alterations are accomplished by cutting out obsolete copy, pasting in new copy, and rephotographing. Such alterations are performed within the printing department. Systems masters are typed in the departments responsible for initiating them and delivered to the printing department periodically throughout the day in batches of 25 to 50 at a time. Metal plates are used for very long runs, when re-running is likely, or for reproduction of halftones and large solids. We run 600 different masters a week. Printing requests are running as high as 600,000 copies weekly. We soon will require additional equipment and space to meet this growing need.

We estimate that we print jobs that would normally be done outside—

Three A. B. Dick Model 360 and one Model 350 offset duplicators produced some 24 million pieces for Admiral Sales Corp. last year.



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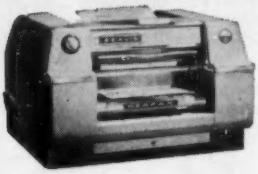

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Eliminate it. Get and keep your billing up to date with the Ozafax 120. Order-invoicing by Ozalid, fastest known way to process your orders, frequently reduces the time cycle between shipping and billing from 8 days to 2!

Faster, error-proof Ozafax billing saved one company $15,000 yearly ... another $17,000. What can it save you?

Make your money work harder for you. The coupon brings facts on this compact, multi-purpose table copier. Mail it today.

OZALID®

Division of General Aniline & Film Corp., Johnson City, N.Y.

Mr. James A. Travis, Mgr., Marketing
Ozalid, Dept. 111, Johnson City, N. Y.

More information please, on how the Ozafax 120 can increase my liquid assets.

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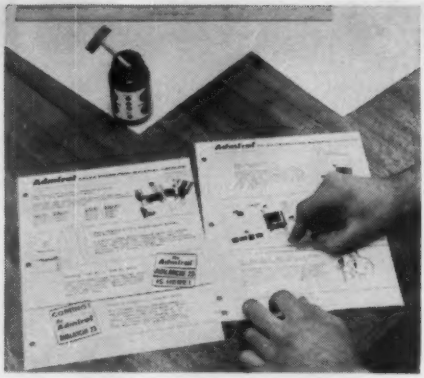
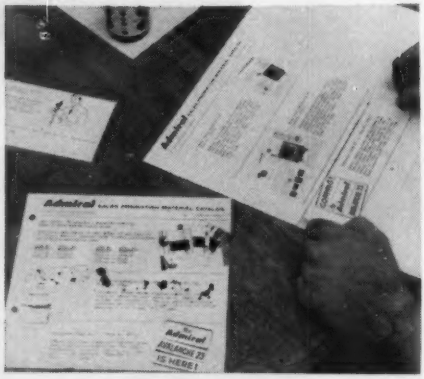
REMEMBER, FOR PEAK EFFICIENCY, ALL OZAFAX COPIERS WORK BEST WITH OZAFAX SENSITIZED MATERIALS

For More Information Circle No. 477

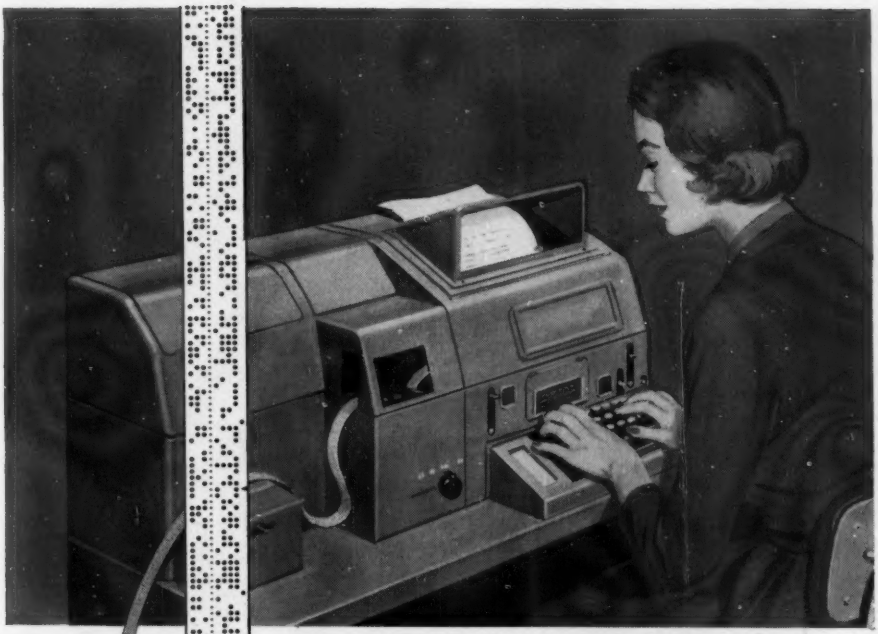




Working with two previously used originals, offset platemaker cuts a section from each (top l.), pastes them together (top r.), then makes a metal (or paper) master from the pasteup (bottom l.). Master then is used to print copies at the rate of 9000 per hour (bottom r.).

forms, literature, letterheads—for about half the cost of outside production. We do other jobs, such as systems work, that could not feasibly be done at all outside. Recent ease-of-use advances in printing and duplicating equipment, which enable semiskilled operators to turn out quality work after only a brief training period, allow much of this equipment to be economically justified in small businesses as well as in large.

Printing supplied from outside sources involves the following steps: placing the order, scheduling delivery, printing, delivering, and receiving. Time involved can run into days. When work is requested through our own department, the original is sent to the department manager with a simple work order form and, in about 20 minutes, 2000 or more copies can be delivered to the requesting department. Because of the speed with which forms and other material for special use can be reproduced, space normally used for storing forms can be used for other purposes. Waste through forms obsolescence is eliminated.



IF YOUR DATA PROCESSING ISN'T ALL THAT IT SHOULD BE—

. . . before you question the efficiency of your machine or operator, try Perfection Tapes and note the improvement. The consistent quality of Perfection Tapes is no accident—every lot of paper is tested to rigid specifications.

Perfection Tapes perforate cleanly and sharply to give undistorted readings. Close laboratory controls assure maximum reruns and folds.

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For More Information Circle No. 441

Sound Organization Is the Basis of Good Management

MILTON REITZFELD, Management Consultant, New York

EFFECTIVE MANAGEMENT has many prerequisites. To promote these requirements, some 3000 articles are published each year in professional and business magazines, but the majority of these ignore the foundation for good management: *organization.* Why?

Perhaps the authors have become so accustomed to the "outer garments" of business and industry that they are loathe to criticize or, worse, consider change. Dare we bite the hand that feeds us? Most of us occupy some niche in an organization. Yet it is the very state and composition of today's business organizations that deter managements from achieving optimum business conditions and objectives.

Let us explore the state and composition of organization in industry and government. Are they classically simple with sharp lines of demarcation to denote functional areas? Or are they large and complicated with blurred lines of authority? The latter appears to be the case. We tend to worship the God of Specialization to a point where, in some agencies, whenever a new task is assigned, a new organizational unit is set up—instead of finding where, in the existing organization, such a project could be placed. This philosophy holds for personnel recruitment as well. We employ thousands of specialists to work in very narrow functional areas.

Organization problem areas are not limited to the over-organized, over-specialized. Such "empires" often have the accoutrements of effective management in the form of organization charts, position descriptions, written procedures, etc. But thousands of companies are so informally constituted that they might be properly called groups rather than organizations. These loose confederations are not organized in the true sense of the word. Starting with a good business idea, they are successful enough to stay in operation without formal organization, job titles, written procedures, organization chart, etc. But are they really successful? A visit to one of these groups recently disclosed much additional paperwork and loss of time because so-and-so didn't know whether or not Mr. A had authority; why departments X, Y, Z were in this project, what they did, etc. Today's organizations run the gamut from loose-knit types to the most complex.

A word about centralization and decentralization. In the past decade, it has become fashionable for the larger corporation to decentralize. The benefits of this are well known, but enthusiasts are quick to gloss over two disadvantages: creation of duplicate organizational units, and lengthening of the span of control between top management and employees.

These facts are available to any one who has the desire and time to explore the situation. Why then have I both-

Most files consume 25 to 27¾ inches of extra floor space just to get their drawers wide open.

These files do not.

These Y&E Pro-Files* have no drawers. With the Rock-A-Tilt mechanism, compartments rock open easily, expose all contents at once. All guides and indexes readable, reachable, from either side. Two people can file or find at the same time without blocking aisle or other cabinets.

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For More Information Circle No. 324

ered to waken this "sleeping dog"? Many vital problems now confront this nation. They begin with our enormous tax burden to support federal, state, county and city governments. It is difficult to refute the direct relationship of our high tax rates with the overlapping and duplication of effort that exists in many governmental agencies. Some industrialists and politicians believe that our high tax base stifles both individual and corporate incentive and could lead to national economic collapse. Top-heavy organizations not only are slow and costly in realizing objectives, but frequently fail to realize them at all.

One of our many shortcomings is inadequate education. Can anyone rightly say we are properly organized for our highest potential? For example, in one county there are more than a dozen separate boards of education. Within each board individual schools employ different texts, forms, procedures, etc., although overall, all schools meet the minimum requirements of their state. Consolidation into one county-wide board of education would save hundreds of thousands of dollars through procurement, facilities and salaries, and more important, improve the quality of education. Although "too much government" receives constant publicity, it is usually limited to the federal level, ignoring the fact that of the 8 million persons employed by government only about one-fourth is in that area. The vast majority work at the state or lower local levels.

Shortcomings in public transportation, highways, and care of the sick are wholly or in part directly traceable to inept organization. More important is the international situation. Although most of us are not qualified to evaluate this, we are concerned when confronted by the statements of qualified persons who are worried about our abilities in this vital area. Invariably such declarations argue for or against different types of organization. Here is how Mohammed Orjub Khan, president of Pakistan —one of our few allies in the Orient, sees us, as reported in the New York Times, June 27, 1960:

"We are beginning to doubt that the governmental machinery of the U. S. is attuned to the requirements of the nuclear age . . . whether the government machinery would permit it to act quickly enough. This machinery appears cumbersome, sluggish and a clumsy juggernaught . . . in my mind, that is the greatest danger to the free world."

Inept organization in business and industry has resulted in poor workmanship, failure to meet consumer demands, and unnecessarily high prices. That such companies remain in business is no real indication that their organization is efficient. The sum of our end-products and services is just as important as our missiles in improving the international situation. The enemy would just as soon win without firing a shot, and he is trying to do just that.

Why do we continue developing excellent administrative systems and outstanding automatic techniques while ignoring the backbone of management: *sound organization?* The vested interests, at every level, who fight for the continuance of their "empires" at all costs would make fitting scripts for mu-

Secretaries you know

The Office "fixture" type

She is very nearly the indispensable woman. Maybe her boss takes her a wee bit for granted—but he is smart enough to pay her handsomely.

This girl is a charter member of the STENOSTIK Club of Superior Secretaries. For years a user of ERASERSTIK, she was delighted when A.W.Faber announced STENOSTIK, a modern ball pen especially designed for secretaries.

She loves STENOSTIK because it is feather-light, beautifully balanced, starts fast and flows smoothly without skips or clots. Its exclusive long-tapered grip is kind to her tired fingers.

Full-length cartridge ink supply in blue, black, red or green. 39¢—3 for $1. *You* are invited to join the STENOSTIK Club today.

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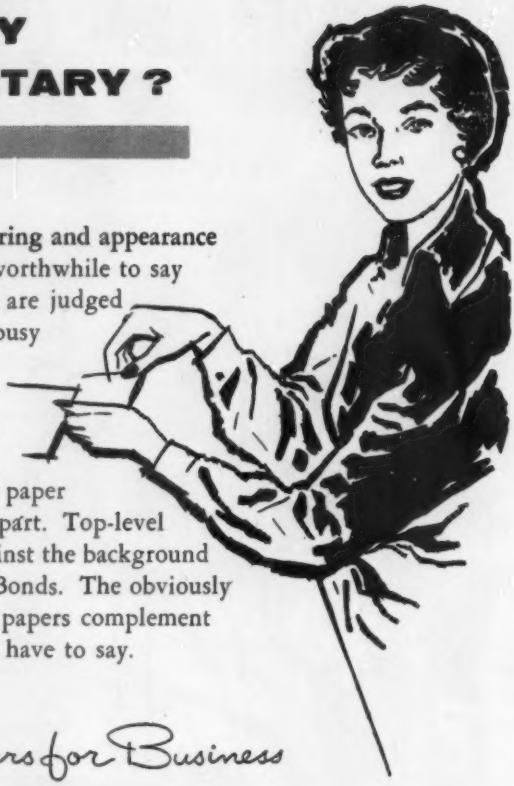
For More Information Circle No. 436

WHO GETS BY YOUR SECRETARY ?



Most likely, the man whose bearing and appearance indicate he has something worthwhile to say gets in to see you. Yes, people are judged by their appearance, but the busy executive must often depend upon his correspondence to convey the best possible image of himself and his company. This is where the quality of the paper selected plays an important part. Top-level thinking deserves to be seen against the background of top-quality PARSONS Bonds. The obviously superior look and feel of these papers complement the importance of what you have to say.

Prestige Papers for Business

PARSONS BONDS

YOURS: Outstanding Letterhead Design Portfolio — created by the Advertising Design Department of world-famous Pratt Institute — on Parsons King Cotton Business Papers. Write on your business letterhead for Portfolio Number 1-52

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PARSONS PAPER DIVISION *NATIONAL VULCANIZED FIBRE CO.* **HOLYOKE, MASSACHUSETTS**

For More Information Circle No. 426

sical comedies, were it not for the irony of it all. A horrible fate may engulf us if we do not revamp and revitalize our organizational structures.

Too much organization improperly coordinated is nothing more than a form of anarchy. Each unit clamps down its own iron curtain and sets about to aggrandize itself. Such structures lead to duplications of effort, high costs, intercompany squabbles, inaccurate data processing, etc. Top management is placed on an artificially high level, shut off from the knowledge required to achieve important objectives. When it is finally cut in on problems, it cannot make decisions because it doesn't know all the facts. Meanwhile, department heads continue on their high and mighty way, secure in the knowledge that in so complex an organization it may take years before their actions and errors are disclosed.

Poor organization, in particular overdecentralization, is the prime cause of red tape and too much paperwork. An amusing insight into the way decentralization acts as fertilizer for growing records is the MAPO (Magnetic Affinity of Paperwork to Organization) concept:

1. Home office (HO) requires additional communication systems to guide and direct the field offices (F).

2. Field offices must communicate their actions and status of projects to home office via reports, etc. Field offices develop their own systems and controls.

3. Field offices then begin old American custom of business politics to justify and strengthen themselves, and increase in size. This requires more organization, more personnel and more paperwork.

4. Home office now finds it needs more people, more organization and more paperwork to manage field offices.

We really begin to realize the size of this personnel-and-paper-eating monster when we place the requirements of

the branches and headquarters face to face:

Every increase in organization begets more paperwork, which begets more people, which begets more organization, which begets more paperwork, *ad infinitum!*

Starting *now* (tomorrow may be too late), management should review its organizational structure and make the alignments necessary to achieve the following:

- Establishment of written, clear-cut overall corporate and departmental objectives, plus an organizational chart based on this data.
- Assignment of properly qualified personnel on *broad* functional bases, with preparation of representative job descriptions for *all* including the "executive suite."
- Orientation of all departments and key personnel toward overall corporate objectives rather than just their individual units; and the use, where proper, of task forces representing all departments.
- Executive review of individual departments and key positions in terms of their contribution to the corporate objectives; and elimination or merger, wherever feasible, of overlapping or unnecessary organizational units and positions.
- Establishment of an executive development program predicated on mandatory internship in *all* departments as a prerequisite for department heads and higher positions.
- Training program for employees on "what their company does and how it operates."
- Annual organizational audit repeating each of the above mentioned steps to insure continuity.

The subject of organization is complex and requires a thorough understanding of leadership, personal motivation and other social sciences. In the larger enterprise or governmental agency, it should be the basis for continual study and analysis by competent organization analysts. The thoughts ventured here are but a simplification of the problem, but if this unsophisticated airing sparks some thought and action by management, it will have served its purpose.

New Kodak Ektalith Method saves estimated $1325 per month in master-making costs!

Cost of making 500 masters per month reduced nearly 50% with new Kodak Ektalith Method

Kodak Ektalith Processor, Model 20 (to left in background) teams up with darkroom camera

Detroit Edison Company gets high-quality offset masters by installing $875 Kodak Ektalith Processor in Copying Section.

This unit, in combination with camera, produces offset paper masters (for reduced, enlarged, or same-size copies) in 3 fast, easy steps:

Just expose . . . process . . . transfer . . . and the plate is ready for the duplicator at a fraction of the former cost and time for camera-produced metal plates. Total savings are estimated at $2.65 per plate.

Kodak Ektalith-made plates reproduce solids without mottling . . . all but end need for plate clean-up work. They have proved highly satisfactory for 500 or so of the short-run orders that are handled monthly at Detroit Edison.

Free booklet gives details on versatile Kodak Ektalith Method and Ektalith units designed for office and darkroom use. It will pay you to call your local Kodak Ektalith Dealer or write Eastman Kodak Company, Photo Reproduction Products Div., Rochester 4, N.Y.

Price is list and subject to change without notice.

KODAK **Ektalith** METHOD ...puts you ahead in offset duplicating

Kodak TRADE MARK

For More Information Circle No. 427

A-M METHODS CUTTING COSTS IS OUR BUSINESS

Expensive lesson for businessmen to learn

Slow, costly, manual methods for writing repetitive business data are still used by many companies. Basic information that is written over and over . . . on all kinds of forms and records. Yet many alert businesses have learned that Addressograph Methods can do this job automatically, accurately, speedily, at much lower cost.

On payroll processing, for example, at least 67% of the writing job is repetitive. In shipping, too, identical information must be written many times to handle a single customer's needs. In these and many other areas Addressograph Methods can automate and simplify repetitive writing jobs.

To find out how Addressograph Methods can serve your business, contact your nearest Addressograph office. Or write Addressograph-Multigraph Corporation, Cleveland 17, Ohio.

For More Information Circle No. 430

Addressograph-Multigraph

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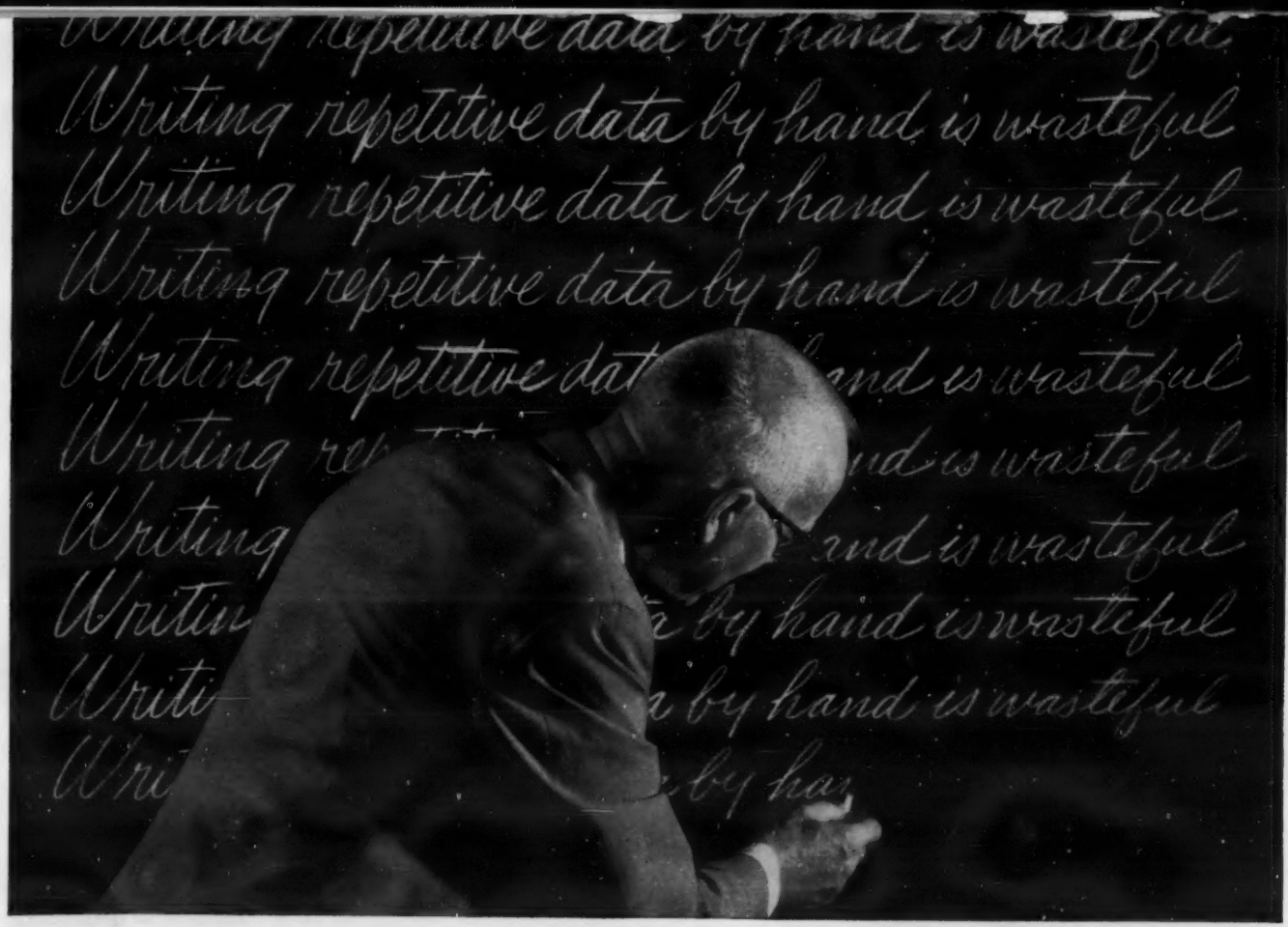
Writing repetitive data by hand is wasteful


Writing repetitive data by hand is wasteful
Writing repetitive data by hand is wasteful
Writing repetitive data by hand is wasteful
Writing repetitive data by hand is wasteful

A. Devaney, Inc., N.Y.

Early Retirees Offer Brainpower at Low Cost

CLARENCE G. SCHOLTZ

SOME LARGE organizations today are adopting the procedure of retiring their sales force, lower management and middle management groups at the age of 55. This is done mainly to create opportunity for the younger staff to advance to the more responsible and higher paid positions before they become discouraged and leave the organization for some other company which will give them an opportunity to advance more quickly. In most cases those who retire at 55 are granted reasonable pensions but, in the majority of instances, not enough for the individual to maintain his current standard of living.

This situation leads those individuals to immediately go out and seek other employment. The pension they receive and the salary they can secure in some other job will permit them to continue on the same basis they are used to for another ten years, at least.

This condition should enable large organizations to obtain trained management and executive material by employing retired individuals for positions which would be more along the line of consultants than actually line authorities. Some companies have hired retired employees to head supply rooms, or mailrooms and other jobs which are not policymaking, but work better with someone in charge who has had management or executive experience and thus knows all the tricks, most of the answers, modern methods and the value of a dollar.

As time goes on, there is no doubt that other organizations will become aware of this opportunity to increase the intelligence of their staff without having to pay excessive salaries to do so. As a matter of fact, such trained personnel could be used as assistants to members of the staff already selected to be executives in the future. Having them associate with experienced men could improve and advance them that much faster, all of which would be to the good of the company. How could you lose if you could hire a $15,000 a year man for $5000. It's being done—so there's gold in them there retirees if business will go looking for it.

"STAR" OF THE OFFICE – STAR PLASTIC TYPE CLEANER!

Ink sticks to it. Dirt sticks to it. Office machine grime sticks to it. Nothing sticks to you! STAR TYPE CLEANER thoroughly cleans typewriter keys, adding, billing and addressing machines, time stamps and rubber stamps —and your own hands stay clean!

In fact, there's nothing to stain. No messy brushes or rags. Nothing to spill...nothing to corrode metals...no fumes and no fire hazard, either. It's quick, easy, modern!

More? It's so economical it can be used daily for months on end. Prolongs machine-life, cuts repairs and servicing. Comes in hinged-cover plastic box. See your nearest stationer for STAR TYPE CLEANER by EBERHARD FABER—your one source of supply for all writing needs.

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EBERHARD FABER
puts its Quality in writing
Wilkes-Barre, Pennsylvania-New York-Toronto, Canada

For More Information Circle No. 209

Tickler File Keeps Executives Up to Date on Status of Projects

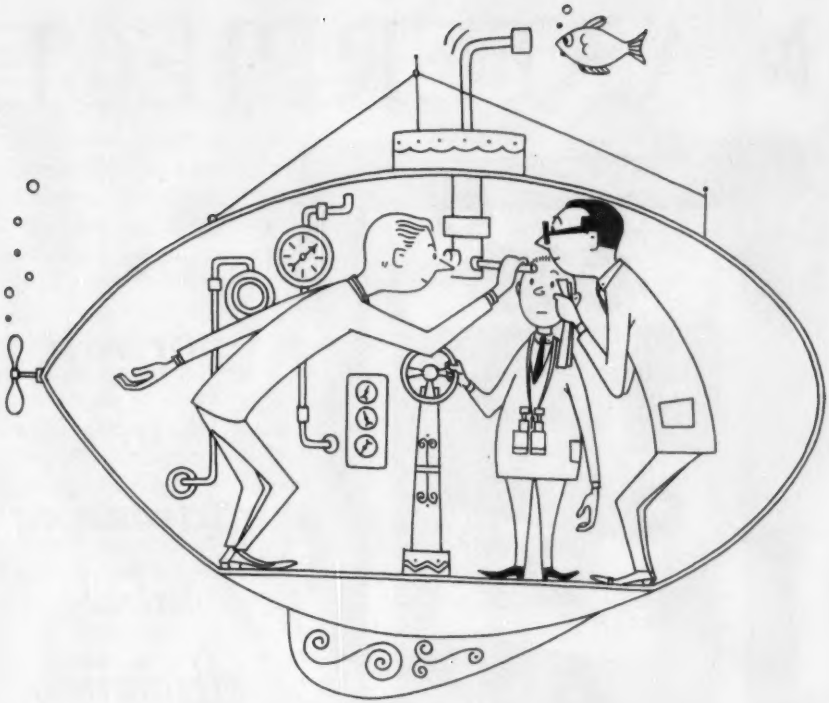
ARTHUR W. CLARK, Vice President,
Home Security Life Insurance Co., Durham, N. C.

THE EXECUTIVE department of our company requested the planning department to develop some means whereby the progress and status of current projects might be readily maintained. The system had to be easy to install and maintain. It had to be flexible and afford a semiautomatic reminder of any executive department responsibilities with regard to a given understanding.

Whenever a new project of a nonroutine nature is phased into company plans, its development and completion become the responsibility of a specific department head. An estimated completion date is developed, and a suspense date is assigned, representing the earliest time at which the executive department will need to be concerned with the status or progress of the effort. The suspense date may represent a reporting date or a planning conference or some other activity in which the executive department will be required to participate. Prior to this time it will be unnecessary for the president, executive vice president or senior operating committee of the company (as a group) to concern themselves with the matter unless the responsible officer wants to bring it before one or more of those involved. Those in the executive department need to have available a quick reference as to what plans are in progress, under whose guidance they are being conducted and the dates of any pending action which may involve the executive department.

A simple chronological sequence file based on estimated completion dates or any earlier suspense dates met these requirements for handy reference. In each case the file reference is under the earliest future date involving the executive department with a given project.

The file is housed in a small 3″ x 5″ card cabinet indexed by month. Daily index cards could be incorporated, but so far have proved unnecessary. Pertinent data concerning each project is entered on a separate card and filed behind the index for the month in which it should next require attention. The suspense date may represent the day some action is supposed to be taken,



"let's up-periscope and have a look around"

This idiom of the agency world simply says to examine an idea or situation carefully and completely. Good advice to our way of thinking... advice you should certainly consider when selecting and ordering paper. Once you have studied all the individual requirements of a particular job, the paper you choose must not only meet those requirements, it must enhance your proud reputation as an expert craftsman.

Next time and every time, look to Fraser printing papers...

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SALES OFFICES: NEW YORK, CHICAGO ■ MILLS: MADAWASKA, MAINE

For More Information Circle No. 340

MASTERPIECE

a portrait of addressing label efficiency

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BOX 149, SCRANTON 1, PA.

For More Information Circle No. 428

or some consideration or review given, or it may be the estimated completion date. If delays or postponements require changing suspense dates, or if contemplated action is taken on one suspense date and a new one is assigned, it is easy to enter a new suspense date on the card and refile it in the appropriate place. An item may come up a number of times prior to its completion.

The Date Established on the card is the day that the project is phased into formal plans and responsibility for its development is assumed or assigned. The Department Responsible may be a senior officer, department head or one of several departments within the area of responsibility. For example, the personnel department may be responsible for a specific assignment. The personnel department, however, reports to the vice president and secretary whose responsibility for the project will be indicated by the color of the card. Executive department projects are on white cards, actuarial on canary, agency on green, and so on, so that major corporate divisions are identified by color. The responsible section within a division is shown by an appropriate entry on the card.

Such a tickler file may be adapted to use by other members of an organization. It lends itself well for use by individual department heads who may employ the same system within their individual areas of responsibility. Minor as well as major projects may be included and the file can serve as a ready reference and reminder for a wide variety of nonroutine or nonrecurring projects. It proves helpful for quick reference to matters which may concern the file holder during a given month and flags various functions which may consume his or his subordinates', time.

PROJECT TITLE

DATE ESTABLISHED

PROJECTED COMPLETION DATE

SUSPENSE DATE

DEPARTMENT RESPONSIBLE

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Corporate divisions are coded by cards printed on index bristol of different colors.

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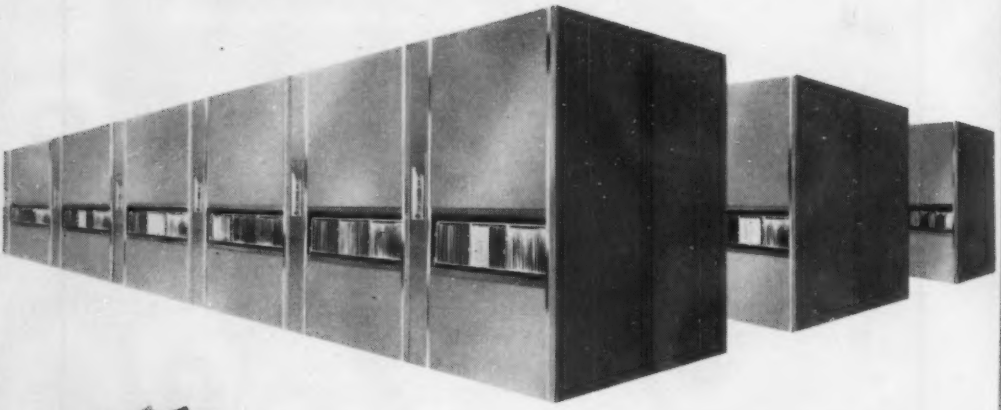

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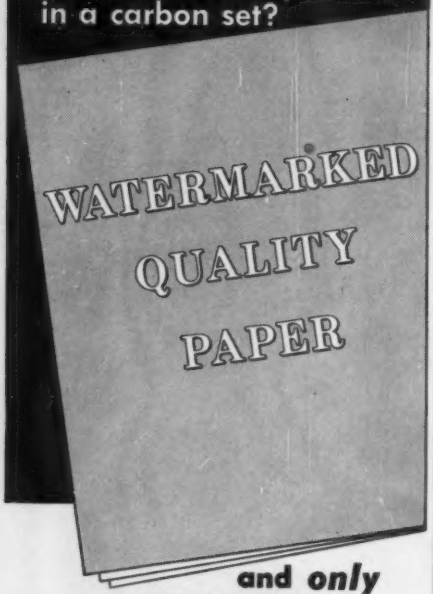

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For More Information Circle No. 278

Are You Employing "Workless Workers"?

ELMER L. WINTER, President, Manpower, Inc., Milwaukee

THE OFFICE workload is ever-changing and flexible. Therefore the work force also should be changing and flexible — tailored to the exact needs of the time. The secret lies in matching performance to pay. Otherwise, we inevitably find ourselves paying for work that is not done. It is up to every executive these days to find the "workless worker" — of whose 2080 hours per year, 306 or 15% are spent off the job. The workless worker is also robbing our industrial coffers of those valuable bonus wages known as fringe benefits. The latest study released by the U. S. Chamber of Commerce shows that fringe benefits average out nationally to about 54.81c per hour, or 22.8% of the total payroll. Thus, besides not being needed at all, the workless worker is being paid his basic wages plus a bonus that is sometimes 50% higher than the basic wage, just to hang around.

Included in the term "fringe benefits" are a host of accumulated privileges and payments that have grown with our economy over a period of years. Included you will find considerable amounts of "time off" as well as benefits. The effect is the same:

Vacations.	Bonuses.
Holidays.	Severance pay.
Lunch periods.	Social Security.
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Medical care time.	Retirement plans.
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We often lose sight of some of these

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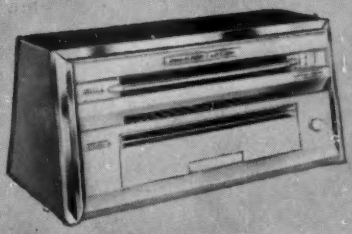
A complete compact Photo-Copying Department — Extra width for extra versatility. Ideal for multi-column accounting reports, comparison charts or any document of any length and up to 15 inches wide. Two sets of automatic paper safes and ejectors* fit into top of cabinet for quick, easy access to legal and letter size papers. Spacious cabinet provides generous space for collator rack (extra equipment), storage of reproduction supplies and additional working area. Machine accommodates 48-oz. or 32-oz. Redi-Pak cartridge, permitting maximum efficiency and economy of developer fluid, whether using oversize or normal-width paper. Finished in 2 shades of grey and trimmed in stainless steel.

model 15-C **$299.00**

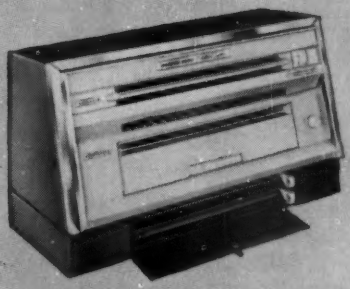
*Paper Safes and Ejectors Extra

Copies **15** *inches by any length*



model 15-A Low-cost portable unit can be used anywhere by anyone. Perfect reproductions, and there is no mixing, no measuring, no mess. Clean 48-oz. Redi-Pak cartridge fits into back of machine. Also accommodates 36-oz. cartridge to prevent waste when used mostly for normal-width documents.

$199.00



model 15-B Table-top model is completely self-contained, delivers top-quality reproductions at low cost. Automatic paper ejectors* in base provides safe, convenient storage and delivery of positive and negative papers. 48-oz. or 36-oz. Redi-Pak cartridge fits into back of machine; no mixing, no measuring. No waste when copying normal width documents.

*Paper Safes and Ejectors Extra

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Speed-O-Print's new exclusive method of handling developer fluid. Compact, easy to use container provides complete cleanliness. Nothing to mix—Nothing to spill.

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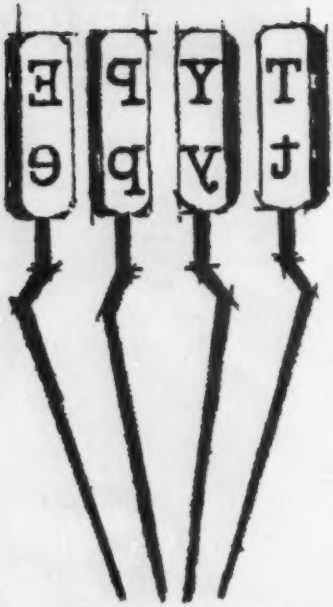

TYPE-type Executive type, department manager type, secretary type or type type – all look visibly better on PLOVER BOND.

A blank sheet of paper becomes a meaningful symbol of your company as soon as it has been typed or printed to convey a message – whether it is a letterhead, purchase order or invoice. White, bright, strong PLOVER BOND improves the appearance of all business communications from the salutation to the signature. Easily erasable, too.

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For More Information Circle No. 338

when we compute the true cost of a permanent employee. In fact, it is in the area of personnel accounting that business management has most seriously lagged behind the times.

A flexible payroll is perhaps the easiest way to match performance with pay — contracting out peakload jobs to a variety of service organizations which specialize in the skills required or who have people "on tap" to do the work, either on their own premises or on yours.

The typical service firm is not merely an agency which finds employees. These companies are actually contractors who assemble the people, equipment and managerial know-how to perform a job. Peakload or specialty jobs can be turned over to them to perform. They, not the customer, must spend the money and time to advertise, recruit, screen, test, train, hire and keep records on the people who are thus employed. They must carry the burden of whatever benefits are required, such as workmen's compensation, bonding, social security and other costs. Although their charges to the customer include such costs, these costs are fewer in number and are borne only temporarily—as and when needed.

"Instant people" is a phrase that might be used to describe what the temporary-help contractor provides. In a larger sense, he actually provides instant service. He has already found, trained and learned to manage the people he uses. It is far more economical to use "instant service" when needed than to go through all the costs (obvious and hidden) involved in ac-

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For More Information Circle No. 239

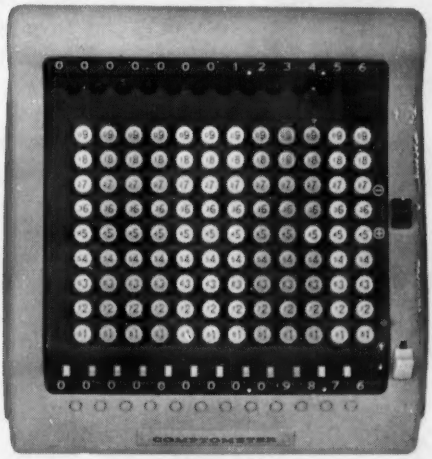
quiring and carrying permanent people.

As an example, a department store might employ seven full-time (35-hrs.-wk.) salesclerks, two of whom are needed only because of peaks on Monday, Wednesday and Thursday. Two employees of a temporary help organization can cover this need on three days with four hours each, leaving five full-time clerks to cover the department's basic needs. With seven clerks employed full-time, 245 hours are worked—and paid for. With five full-time employees and the services of two temporary helpers, only 199 hours are worked—46 hours fewer. At $1.50 per hour per employee, for example, this can come to a sizeable amount.

Consider the experience of a manufacturer of a home permanent kit who utilized a temporary help service to replace metal curlers with plastic ones in millions of kits. The kits were shipped to Chicago where 90 girls started the job one Monday morning. On the second day the flow of kits slowed down drastically, so only 40 girls were assigned for Wednesday, and none for Thursday. Friday the staff was brought back to 90 as the kits started pouring in again. The manager of the temporary help service asked the manufacturer how many girls he would have employed each day for the task. The answer was 90, just as many as were needed the first day. The manufacturer would have had to pay 90 girls each day, whether he needed them or not; temporary help allowed the work force to fluctuate with the workload.

An automobile tire manufacturer in Michigan had to map out a parts schedule for his plant once a month. Before

NEW



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Complete line of matching furnishings

"BUILT TRUE CLEAR THRU"

HOOSIER DESK COMPANY
Jasper, Indiana

For More Information Circle No. 264

he discovered temporary help he used 50 full-time workers more than two weeks a month to do the job. Many of these employees had little else to do during the other two weeks. Now, employing only enough men as are needed for production and using the services of 150 girls one weekend a month, the manufacturer saves an estimated $75,000 a year. Normal production is not slowed because the job is done on weekends.

Nor is releasing an employee a costless action any more. Coupled with his hiring, the dismissal of an employee costs one Chicago firm $411, an insurance company $700, and an aircraft manufacturer $1000. Thus, to hire and dismiss his own temporary help is presently just too costly for an employer. For a short-term job, it is hard for the private firm to match the speed and efficiency of a temporary help service.

As I travel around the country and talk to many office administrators, I ask, "What is the cost of labor turnover in your office?" I get many answers. A few can tell in dollar costs, but most cannot even estimate either the cost of their turnover or the amount of turnover. This invites considerable study because of the vast opportunities to control cost through a reduction of labor turnover. How much actually is it costing you in your organization? Some recent studies indicate that if you are hiring a new office employee for $3000 per year, you incur the following costs:

Salary	$3,000
Training investment in the new hire	500
Loss in training investment in one out of every three employees hired	150

For More Information Circle No. 194→

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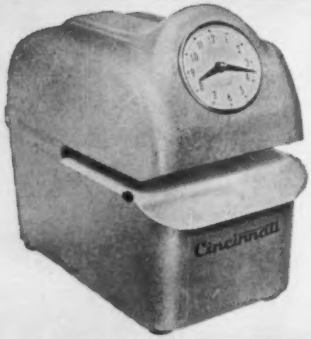

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THE **Cincinnati**
TIME RECORDER CO.
1733 CENTRAL AVE.
CINCINNATI 14, OHIO

For More Information Circle No. 277

Capital investment depreciation for employee	450
Fringe benefits	740
Total	$4,840

The Prudential Insurance Co. reports that is costs them about $700 to hire, indoctrinate and train a high school graduate as a dictating machine operator.

Before you can come up with methods of controlling your labor turnover, you must determine the causes. A study made recently pinpointed three major causes: (1) an inadequate supply of desirable employees; (2) lack of opportunity; (3) inadequate or poor supervision.

Through proper planning, methods can be established to control labor turnover. In setting up a program of this type, consideration should be given to salary and wages, proper induction, communications with employees, selection policies and procedures, management and supervisory training programs. Executive interviews will also help to determine the causes for turnover. It is important to have records which will provide you with a monthly labor turnover report. This will keep you aware of the problem continuously and pinpoint areas needing attention.

CORRECTION

Authors' names got mixed up with the wrong book titles in "How a Company Library More Than Justifies Its Cost," an article in the February issue. Ruth Schaefer, chief librarian for Mutual of New York and author of the article, says the list in which the errors occurred should read: *Ulrich's Periodical Directory; U. S. Government Serials and Periodicals,* by John Andriot; and *Guide To Reference Books* (and supplements), by Constance Winchell.

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Always send a "Time-Saver" courtesy carbon copy

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For More Information Circle No. 457

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Not Miss Clock-Watcher. She's been standing on a hard floor all day and her feet and back are aching—she can hardly wait to go home.

These legs belong to Miss Efficiency, above, whose boss provided her with a HYGIENIC FOOT COMFORT MAT. She's been standing all day too, yet her work is still accurate and efficient at closing time. Even her friendly "welcome customer" composure remains unruffled.

Here's the SECRET of

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Your selection of a beautiful rubber tile flooring is bonded to a sponge rubber base. Unlike cheap utility mats, this combination provides proper support without being mushy—will wear for years without denting or puncturing. Edges are beveled for safety and appearance.

Available in: Both Mats and Runners
8 Decorator colors to match any office decor

See your OFFICE SUPPLY DEALER or write to
FLOORING DIVISION—Dept. E
THE HYGIENIC DENTAL MANUFACTURING CO.
AKRON 10, OHIO, U.S.A.

For More Information Circle No. 232

RIGHT or WRONG in Employee Relations

A ROUND-UP of day-to-day employee problems and how they were handled by management. Each incident is taken from a true-life grievance which went to arbitration. Names of some principals have been changed.

Can You Eliminate an Employee Service?

What Happened:

For 15 years the company had provided special services at its cashier's window on company time. Employees could transact personal business, cash checks, buy money orders, etc., at any time during the day.

Because of financial troubles, management reduced costs wherever possible. One economy was that employees were allowed to use these services only during lunch hour and after 5 p.m. The employees protested. The company finally agreed that they could use the services during working hours, but they would not be paid for time away from work. Employees argued:

1. Services which have been provided for 15 years are a genuine part of the working conditions.

2. Management can't change working conditions.

The company felt that its right to manage was being attacked, and put forth the following arguments:

1. The matter of these services is not in a contract. The company has the right to make its own decision.

2. As a matter of good faith, the company reconsidered this problem and made some concession.

3. These services are a luxury—and employees never protested in the past when luxury services were eliminated.

4. It is urgent to the interests of employees and of management that efficiency be promoted.

Was the Company:

RIGHT ☐ WRONG ☐

WHAT ARBITRATOR WILLIAM J. FALLON RULED: "These services were a convenience for employees, but are subordinate to the greater considera-

tion of efficiency of operation during a critical period in the company's struggle for survival. Employees yield a benefit they have enjoyed for many years only with great reluctance—but this is the type of benefit which, if eliminated, may assist in obtaining other more substantial and enduring benefits such as increased employment, improved financial stability for the company and job security for the worker. The company acted within its rights."

Is Sick Pay Justified for Taking a Physical Exam?

What Happened:

"Say, I'll have to take Wednesday off," Bob Humphries said to his supervisor on Monday. "I've got to go see the doctor. I made the appointment a month ago."

"Okay, the workload for this week looks pretty normal," said the supervisor. "You're not sick, are you?"

"No," answered Humphries. "I'm not sick. I just think I better get a general check-up. I'll get sick-leave pay for the day, won't I?"

"No, I don't think you'll get paid for the day."

When Humphries returned to work on Thursday he gave the supervisor a company form signed and dated by the doctor stating that Humphries "was ill and under my care . . . and unable to work." When the supervisor again asked him if he'd been sick, Humphries said, "No." Later the manager asked him if he'd been sick. 'No," he replied, "but my legs have been troubling me. I was afraid I might have arthritis. It's a relief to know nothing is wrong with me."

The company ruled that Humphries was not entitled to a day's sick pay—so he filed a grievance with these arguments:

1. The rules says "an illness must be certified by a licensed practitioner before payment will be made for sick leave. The certificate must state that the employee was unable to work."

2. I submitted the doctor's certificate on the company form as required. The company can't contradict the certificate.

Management saw this grievance as a threat to the reasonable, but limited, purpose of the sick-pay allowance. It argued:

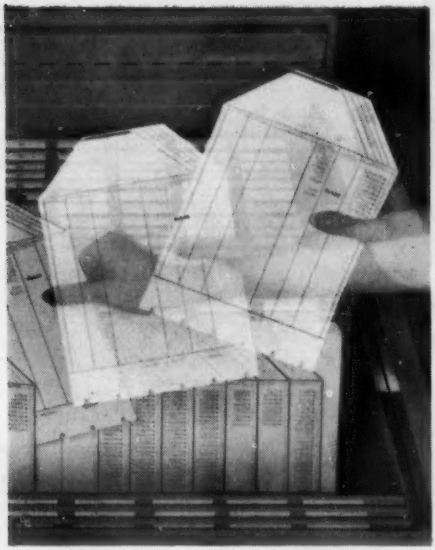
1. The rules provide that "if an employee is absent because of illness on regularly scheduled working days, he may use his 'sick-leave' credits."

2. The purpose of sick pay is to help the worker when he loses regular pay because of illness.

3. Humphries said he wasn't ill. He had the appointment for a month. If he were ill he wouldn't have waited that long.

Was the Company:

RIGHT ☐ WRONG ☐



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New quick-as-a-flash VERI-VISIBLE halves posting or checking time

FIND AND TAKE OUT INSTANTLY. Veri-Visible keeps many thousands of records on view at operator's finger tips. She instantly finds and takes out any one of them for post haste posting by hand or machine.

LEAVE IN AND CHECK INSTANTLY. Without removing card, operator can check indexing and balance on completely visible corner and side margins. Compact, Veri-Visible portable or floor units handle anything from coded punch tapes and cards to one-time statement and ledger sets. Send coupon for full facts.

Left-to-right indexing keeps thousands of cards at operator's finger tips.

Adjustable dividers let you fit system to records.

"Card Out" signals speed refiling.

Double-view margins keep customer's name and balance always on view.

ACME VISIBLE

ACME VISIBLE RECORDS, INC.
2203 West Allview Drive, Crozet, Va.

I'd like to know more about the way Veri-Visible systems can cut time and costs on my posting, checking and billing.

NAME_____ TITLE_____

COMPANY_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

For More Information Circle No. 327

WHAT ARBITRATOR WHITLEY P. McCOY RULED: "It is perfectly clear that sick leave is payable only to employees who are unable to work because of sickness. Since Humphries admittedly was not sick, the rules gave him no right to sick-leave pay. The provision requires that a certificate be submitted, but does not state that such certificate shall be conclusive and final. The grievance is denied. Humphries is not entitled to be paid."

Do Written Tests Outweigh Work Experience?

What Happened:

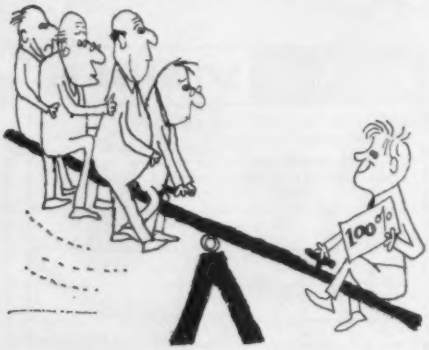
The company had an opening in the department. Mike Albert bid for the job with 11 other men who had more seniority than he. The company had a standing practice of using tests to aid in determining the best qualified employee when promotions were made.

The 12 men took the written test. The questions were based on the duties spelled out in the description of the job classification. Mike got the promotion.

Tom White, one of the men bidding for the job, had ten years' experience and felt that his seniority and work experience entitled him to the job because:

1. Much of the promoted job involved work that he had ten years of experience in.

2. The written test was "academic" and work on the job requires practical experience.



The company's reply was:

1. The job required more skills than Tom has—and Mike Albert was competent in them all. Tom White wasn't.

2. The written test was fair. It was used in the past. It tested the skills needed on the job and it was given in a manner fair to all 12 men.

3. Tom White failed the test.

Was the Company:

RIGHT ☐ WRONG ☐

WHAT ARBITRATOR JOSEPH SHISTER RULED: "The test was fair and proper. The questions were based on the job's duties. Granted that all the other employees took the identical test, the company did not discriminate against Tom White. The argument that a man should not be judged on the basis of an 'academic' test is unpersuasive. The use of such 'academic' tests is one of long-standing. The fact of Tom White's experience is also unpersuasive because, while it is true that the job calls for this kind of experience, it also calls for other abilities. The job necessitates a competence in all the relevant job duties—not just some of them. The company's choice of Albert was fair. Tom White's grievance is denied."

In Ten Seconds...

ANYTHING *is distinctively*

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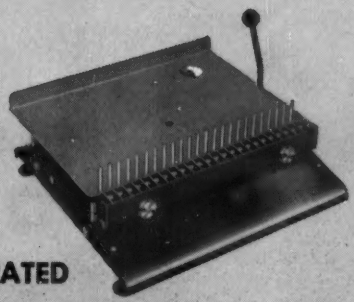
...right in your own office or plant...

for PENNIES!



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PUNCHING UNIT Exclusive precision shearing action produces accurate, clean, punches.

BINDING UNIT Just insert cover and pages — pull lever, look again! It's PLASTICO-bound — looks like "a million," costs pennies!

exclusive
ARCH DESIGN
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for live-wire distributors handling office equipment.

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Firm Name _____

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department can be YOURS for less than a dollar an hour!

For less than a dollar per *working hour*, you can purchase a complete ATF offset department, including: press, camera, darkroom sink, negative layout table, platemaker, and utility table. If you have some seldom-used equipment to trade in, chances are you will need little or no down payment.

Or you can lease the complete "package"—or any part of it—without trading in any equipment or making a down payment.

Either way, you get brand new equipment—and only what you need—on the easiest terms. You can pay as you go and make a profit as well.

Heart of this plan is the ATF Chief 15, the small press with the big press features...the press which has been chosen by over 1500 professional printers. You can see this press and the related "package" equipment in operation at your nearest ATF Branch Office; or your ATF Representative will supply full details, including a folder, "How to Set Up for Offset," which outlines various plans and choices of equipment. If you prefer, use the coupon below.

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ATF American Type Founders Dept. A
200 Elmora Avenue, Elizabeth, N. J.

I'm interested in your "Offset Package Plans" on a ☐ purchase ☐ lease basis.

NAME ..... TITLE .....

COMPANY .....

STREET AND NUMBER .....

CITY ..... ZONE ..... STATE .....

(If you have trade-in equipment, list descriptions, models, serial numbers)

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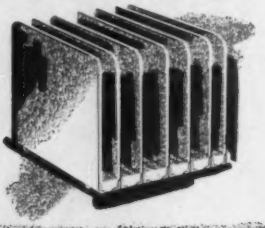
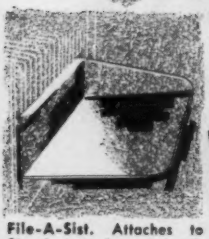
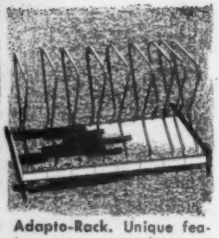




File-A-Sist. Attaches to file drawer. Leaves hands free. Removes instantly.



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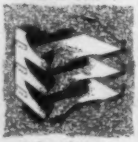

"Build Up" Horizontal Desk Tray.

Flexible Steel Kleradesk — Model D

Write today for full information and prices.

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For More Information Circle No. 361

Annual Office Management Forum

(Continued from February)

Looks Ahead Five Years

We have not taken any steps toward automation due to the cost involved. There is a tremendous need and great demand for equipment suitable for the smaller office (10-20 clerical employes). We are looking for a compact typewriter-computer with printer output without conversion to cards. A strictly tape application for input and output. We want to bring information stored in the computer directly to the printer for printing such forms as sales analysis, accounts receivable aging, cumulative payroll information, etc. The cost of this unit should not exceed $15,000. This may be five years off but we know that competition will force it to come sooner or later. The greatest changes in office automation lie ahead of us. Most of the machines to be developed within the next five or ten years are not even in the minds of men who are manufacturing data processing equipment today. Our use and purchase of conventional office equipment will continue until we can justify going to completely automated procedures. However, we do not plan to buy any new typewriters, adding machines, calculators, etc., unless the ones we are using fall apart. We are making efforts to maintain our present equipment in satisfactory working condition.—GEORGE R. DAWSON JR., *Office Manager,* Shedd-Bartush Foods, Inc., Greenville, S.C.

To Expand Mechanization

We have for several years used a mechanized system of preparing payrolls and related statistics as well as revenue accounting. We plan to expand these systems into other fields of accounting procedures in an effort to eliminate expensive

DEAL YOURSELF A ROYAL FLUSH

Here's contoured comfort that means greater work output. Ask about our #1202 armless, fixed-back chair.

Only Royal offers so many ways to answer such a wide variety of specialized office needs. Whether they be complete work stations, reception seating, or a single office chair—Royal fills the bill with ROYAL office chairs, ARNOT Partition-ettes® and Modular Desk components, DELUXE Verti-Files and Cabinets, and famous VISCOUNT modular reception seating. All in the advanced styling that makes Royal famous—each with durability to match. An increasing number of successful firms are choosing Royal to satisfy their growing needs. Why don't you? Write today for complete information. ROYAL METAL MANUFACTURING COMPANY, Dept. 7-C, One Park Avenue, New York 16, New York. In Canada – Galt, Ontario.

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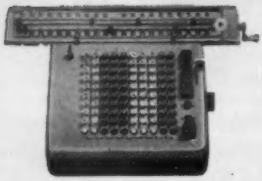
For More Information Circle No. 393

NEW—*Another Achievement from Monroe*

Never before has so much calculator function been compacted into so small a unit. Or so low a price. This is LA-9, the newest, the ultimate in Monroe's famous L line calculators. This one's honored antecedents today are accomplishing their time and money saving missions on more desks in American business than any other calculator. LA-9 covers less area than a letterhead sheet, weighs less than 18 pounds. Yet this new compact automatically performs many of the jobs that much bigger and costlier machines do. Its peak performance is guaranteed and maintained by Monroe's nationwide service organization. And at so moderate a price, it can quickly pay for itself through its efficiencies. for CALCULATING · ADDING · ACCOUNTING · DATA PROCESSING MACHINES

See the MAN from MONROE



Monroe Calculating Machine Company, Inc. Sales and service in principal cities everywhere. General offices, Orange, N. J. A DIVISION OF LITTON INDUSTRIES

For More Information Circle No. 323

paperwork handling. In our opinion manufacturers of data processing equipment are on the right track as far as they have gone. Of course, accounting in the transportation industry differs greatly from that in other industries and we feel that there is still much to be accomplished in this direction. Our purchase and use of conventional office equipment will approximate that of the past few years.—C. J. JUMP, *Senior Vice President,* REA Express, New York.

Investigating EDP

This Department is currently investigating the feasibility of using an electronic data processor, with magnetic tape file, for statistical and reimbursement accounting applications. Conventional punched card equipment is now employed. We believe that the electronic data processing equipment recently brought on the market for smaller systems applications may better

(Continued on page 252)

Save TIME and DOLLARS with

"INSTANT 2-WAY RADIO CONTACT"

Talk and listen to persons "on the job"..at home..at play

New 2-way radio actually fits into your pocket. Exclusive, rechargeable battery lasts year or more. Range—½ to 1 mile. No license required.

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Pocketphone

THE FINEST 2-WAY RADIO AVAILABLE TODAY

Ideal for office, factory, stores, surveying, construction, sports, recreation, home. Finest quality available. Makes handy paging system. Use with Globe Electronics CB-100A or CB-200 for longer range systems. • **Actual size — 1⅝" x 2⅜" x 6¼"** • **Weight – 13 oz.** • **High impact Cycolac case** • **All Transistorized.** **$125.00 each**

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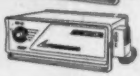
CITIZENS BROADCASTER CB-100A . . . Complete 3-channel, 2-way station. Fixed or mobile installation. Easy to install, operate. Range 5-15 miles. **$139.95 each**



BROADCASTER DELUXE CB-200 . . . A rugged transceiver for commercial use. Transmits on 5 channels. Receives on all 22. Adapts to selective calling system. **$189.95 each**

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A Division of Textron Electronics, Inc.
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Please send me complete information on the new Globe Electronics ☐ **Pocketphone** ☐ **CB-100A** ☐ **CB-200**

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For More Information Circle No. 363

INTERCHEMICAL Corporation • Copying Products Division, 417 East 7th Street, Cincinnati 1, Ohio

Rx SUZY SECRETARY

Spring tonic – for your copying problems:

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IC INSTANT COPY PAPER

Just what the doctor ordered, says Suzy Secretary—new IC Instant Copy Paper to add new life to your office copying jobs. Makes copies of letters and records . . . **FAST . . . to LAST** on your Thermo-fax machine.

- **Long-lasting copies** — won't deteriorate and virtually fade-proof.
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Try it . . . and you'll say —"Now I see IC!"

For your various copying needs, there's a job-engineered IC Instant Copy Paper. Choice of white and colors. Available through quality office supply dealers in all major cities.

For more good news about revolutionary IC Instant Copy Paper, attach this coupon to your Company letterhead and send to:

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INTERCHEMICAL Corporation
417 East 7th Street
Cincinnati 1, Ohio

NAME _____

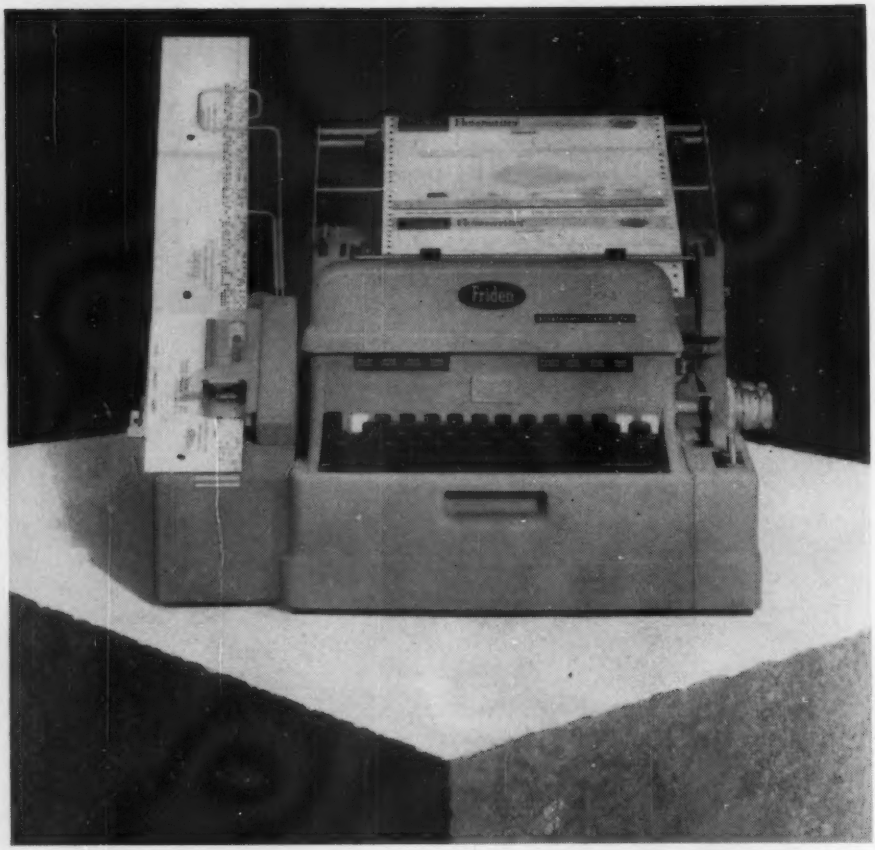
COMPANY _____

ADDRESS _____

☐ Please send further information.

☐ We would like a demonstration of IC Instant Copy Paper.

For More Information Circle No. 424



Automation Cornerstone

The Friden Flexowriter® has three basic capabilities: 1) It can type, 2) it can *record* what is typed on punched paper tape, 3) it can *read* tape back to itself, retyping automatically at 100 words per minute.

These things are remarkable, but the important point is this: Tapes produced on the Flexowriter can automatically control a great many *other* machines. Thus the Flexowriter performs the key task in automation, *translating human language into a language that machines can understand.* Applications for the Flexowriter are immensely varied. And the surface has barely been scratched.

It will pay you to learn more about this machine and the jobs it could be doing for you. Your local Friden Systems Representative is the man to see. Or write: Friden, Inc., San Leandro, California.

THIS IS PRACTIMATION: automation so hand-in-hand with practicality there can be no other word for it.

© 1961, FRIDEN, INC.

Friden

Sales, Service and Instruction Throughout the U.S. and World

For More Information Circle No. 211

AUTOMATIC SYSTEMS

Current trends in office automation including data processing.

A Census of Computers

General Purpose Digital Computer Systems (Vacuum Tube)

Manufacturer	Computer	Delivered	On Order
Large-Scale			
Burroughs	Burroughs 220	50	12
IBM	IBM 701**	7	0
	702**	8	0
	704	100	—
	705 & 750 III	160	10
	709	45	—
Minneapolis-Honeywell	Datamatic 1000**	7	0
RCA	Bizmac I**	1	0
	Bizmac II**	4	0
Remington Rand	Univac Sc. 1100 Series*	45	3
	Univac I* & II	74	1
Medium-Scale			
Alwac	Alwac III-E (tapes)	5	0
Bendix	G-15 (tapes)	165	—
Burroughs	205 (tapes)	90	—
IBM	650 (tapes and/or Ramac)	260	5
Remington Rand	Univac File Computer	127	6
Underwood	Elecom Series**	11	0
Small-Scale			
Alwac	Alwac II** & III**	8	0
	Alwac III-E	26	2
Bendix	G-15 (no tapes)	197	—
Burroughs	205 (no tapes)	22	—
Idaho-Maryland	Readix**	5	0
IBM	650 (card)	1,090	20
	305 Ramac	900	200
National Cash	National 102**	30	0
Royal-McBee	LGP-30	430	10
Total Vacuum Tube Computers		**3,867†**	

* Does not include Univac 1107 Computer.

** No longer in production.

† 4.5% decrease from July, 1960.

General Purpose Digital Computer Systems (Transistor)

Manufacturer	Computer	Delivered	On Order
Autonetics	Recomp II	75	50
	Recomp III	0	15
Bendix	Bendix G-20	0	—
Control Data	CDC 1604	10	10
	CDC 160	21	50
General Electric	GE 225	5	35

IBM	IBM 7070 & 7074	30	320
	7080	0	40
	7090	50	150
	1620	100	400
	1410	0	150
	1401	75	4000
	Stretch	0	4
Minneapolis-Honeywell	Honeywell 800	3	—
	Honeywell 400	0	—
Monroe	Monrobot XI	5	75
National Cash	National 304	12	15
	National 315	0	—
	National 390	3	105
Packard Bell	PB 250	3	34
Philco	Philco 2000	11	22
RCA	RCA 601	0	4
	501	47	60
	301	0	65
Ramo-Wooldridge	RW 400	2	5
Remington Rand	Univac 1107	0	—
	Univac III	0	35
	Univac 490 Real-Time	0	9
	Univac Solid State 80 & 90	207†	255†
	Larc	1	1
Royal McBee	RPC 9000	1	23
	4000	0	43
Sylvania	Sylvania 9400	0	2*
Total Transistor Computers		**661††**	

† Includes foreign orders and installations. †† 226% increase over July, 1960.
* For in-company installations.

Miscellaneous Digital Computers

Burroughs	E-101	190	—
Clary	DE 60	11	6
IBM	IBM 604	4800	—
	607*	550	—
	608*	30	—
	609 & 609B-1	20	150
	610	150	—
Monroe	Monrobot IX	96	25
Remington Rand	Univac 60 & 120	900	50
Underwood	100*	6	0
Total Miscellaneous Computers		**6753†**	

* No longer in production. † 0.6% increase over July, 1960.

A three-fold increase in solid state computer systems delivered since last July was registered in the January ADP Newsletter of John Diebold & Associates, New York. Vacuum tube computers decreased 4.5% in number below the figures of six months ago. The consulting organization has classified the computers as follows: vacuum tube, large-scale using magnetic tapes, costing $1 million or more; vacuum tube, medium-scale using magnetic tapes, costing from $500,000 to $1 million; vacuum tube, small-scale without magnetic tapes but internally programed; and transistor computers. Miscellaneous computers are card calculators and others that do not come under the foregoing headings.

How Delegated Authority Can Be Indicated By Machine

JOHN B. McMASTER, Chief,
Procedures & Reports Section,
Atomic Energy Commission,
Albuquerque Operations, N. Mex.

HAVE YOU EVER wanted to know whether you had sufficient authority to accomplish a certain function or task? Would you like to know whether all the things your organization is responsible for doing are being done? Can you determine whether functions are logically grouped and assigned, and whether certain functions actually contribute to the job? Can you appraise the effectiveness with which departments and individuals are accomplishing their functions and tasks? Can your supervisors justify the retention of current personnel or requests for new people? Do you have accurate job sheets prepared for personnel in your organization? Do you want to simplify administrative procedures and thus reduce unnecessary paper shuffling and costs?

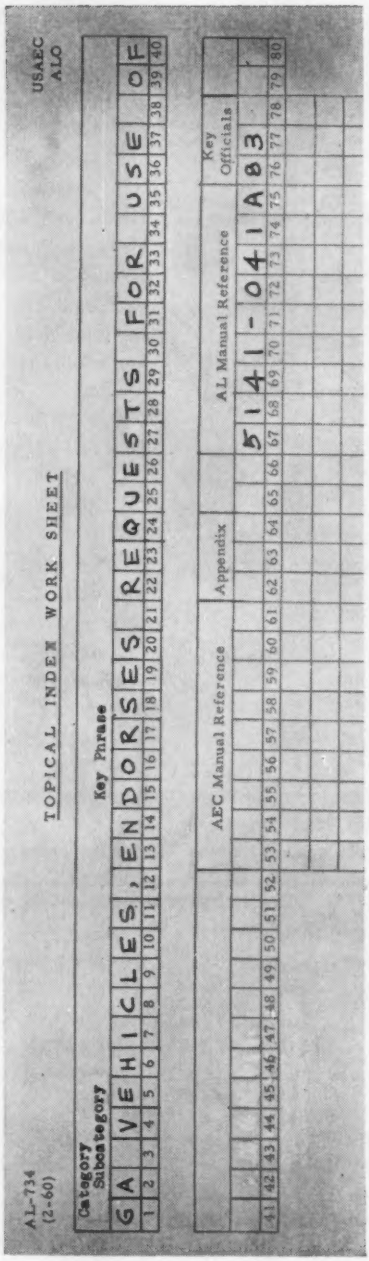


Fig. 1. Posting form from which cards are punched for all delegations.

DELEGATIONS OF AUTHORITIES AND RESPONSIBILITIES WITHIN ALO

AREA MANAGER, SAO

PROPERTY AND SUPPLY

PLANT & EQUIPMENT, MAINTAINS PER POL & REG RE	5401-043
PROP,ASSURES COMPL W/POL & PROC FOR USE & DISP OF	5170-034
PROP,ASSURES COMPL W/POL & PROC FOR USE & DISP OF	5170-035
PROP,ASSURES COMPL,W/PROC,FOR DISP,OF EX,& SUR,PER	5170-031
PROP, IDENTIFIES EX & SURPLUS PERSONAL	5170-05
PROP IN FOREIGN AREAS,NOTIFIES OF EXCESS PERSONAL	5172-034
PROP MGMT PROCED,ASSURES CONTR COMPLIANCE WITH	5101-048
PROP,REQUESTS AUTH TO SELL SURPLUS PERS	5180-205
PROP,SUBMITS INFO TO E&C RE DISP,OF REAL	5003-051
PROP,SUBMITS INFO TO SUPPLY RE DISP OF REAL PERS,	5003-051
PROPERTY, ASSURES PROPER UTILIZATION OF GOVT-OWNED	5130-047A
VEHICLES, ENDORSES REQUESTS FOR EMERGENCY USE OF	5141-041B
VEHICLES, ENDORSES REQUESTS FOR USE OF	5141-041A
VEHICLE POLICIES & PROCED,ASSURES CONFORMANCE WITH	5142-053
VEHICLE REG BY CONTR,REPORTS TO SUPPLY ISSUANCE OF	5141-042B
VEHICLES, REQUIRES REGULATIONS PROHIBITG USE OF	5141-042A
VEHICLES, SCHEDULES SERVICING OF	5142-105

TRANSPORTATION

GBLS AS ISSUING OFFICER,SIGNS	52XA-02DE
PROTECTIVE SERV, ASSURES ECON USE OF	5203-03
TRANSPORTATION DIRECTORY,FURNISHES CURRENT INFO RE	5203-031
TRANSPORTATION PROCEDURES,APPLIES ESTABLISHED	5201-024

REAL ESTATE

EASEMENTS,DETERMINES & JUSTIF NEED FOR	5303-041
PROP,FURNISHES INFO RE AVAILABILITY OF REAL	5306-032
PROP, JUSTIFIES NEED TO TRANSFER GOVT-OWNED	5302-024
PROP,JUSTIFIES TITLE ACQUISITION ON PVT-OWNED REAL	5302-024
PROP,SUBMITS REQUESTS FOR USE BY OTHERS OF REAL	5305-021
PROPERTY, APPROVES FOR USE BY OTHERS OF AEC REAL	5305-021
PROPERTY, REQUESTS TEMPORARY USE OF REAL	5304-031
REAL ESTATE POLICIES, ASSURES COMPLIANCE WITH	5301-02

Fig. 2. A list of delegations printed by machine from punched cards.

The answers to all the above questions is obviously yes, or you wouldn't be a supervisor or executive. Any member of management worth his salt immediately recognizes the need for doing these things because each is important to the attainment and maintenance of optimum organizational efficiency and employee morale. The only lament seems to be over the amount of time which such tasks ordinarily consume and which thus must be subtracted from direct work accomplishment. Is there any way that the old time-honored, usually tedious and sometimes unreliable methods can be circumvented, or at least shortened and made more reliable? Let's investigate and you be the judge.

We all know the simple truths about how large organizations, of necessity, must accomplish their mission. One man, not being able to accomplish all of the necessary transactions and tasks, must divide the overall workload into manageable components and then as-

sign them to his staff and work force. The larger the organization, the greater the responsibility for dividing and redividing work. For example, the president of a large corporation usually slices his responsibility for company operation in four to six parts which he delegates to his vice presidents. These work responsibility components are, in turn, divided and redivided as they filter down through supervisors of lower units until at long last some individual is charged with responsibility for performing a given task which, when fitted together with all the tasks being performed throughout the company, becomes a neat jigsaw picture known as completed mission—design, production and sale of a product; or planning and sale of a service.

Delegations within an efficiently run organization are made a matter of record, this record most generally being the organization's administrative policy and directive system. In any event the various delegations made to any one subdivision are usually widely scattered in various parts of the administrative policy and directive system. The result is that it becomes difficult to pinpoint and group all responsibilities with which the suborganization is charged and thus answer the seven questions listed at the beginning of this article. How then can we isolate delegations and arrange them to best help supervision pursue the seven objectives?

The tool which can greatly reduce the time element in realizing the objectives, and insure greater accuracy in the end results, is a simple punched card machine process which I call Listing of Delegations. Simply explained, it is prepared by having the administrative policy and directive system screened for all delegations which appear, putting them on a posting document (see Fig. 1) as follows:

1. The key word or phrase appears first followed by a comma and the lead-in portion of the delegation, verb first, *e.g.*, "vehicles, endorses requests for use of." All delegations pertaining to vehicles will thus be grouped in the machine run for ease of use.

2. Identify each delegation with a category and, when appropriate, subcategory of work. In this way, delegations when finally run will be easier to locate and use.

3. Include identifying reference which contains the detailed delegation.

4. Identify the executive to whom the redelegation has been made.

Following necessary sorting and collating operations, the Listing of Delegations, to be most useful, should be run according to categories and subcategories of delegations by responsible official (see Fig. 2). Following are practical applications of our Listing of Delegations:

1. *Determining Authority.* Do I have sufficient authority to accomplish a certain task? To find out, simply look for the authority under the proper category and subcategory of the Listing. If the authority is not listed and is considered necessary, the official concerned may initiate a request for its inclusion in the administrative policy and directive system. If the delegating authority deems the request appropriate, the requester's problem is solved and he may proceed under the authority of the sys-

(Continued on page 288)

Computer Print-Out System

THE DACOM (DAtascope Computer Output Microfilmer) System was announced by Recordak Corp., Eastman Kodak subsidiary. The system will convert information from magnetic tape into plain language on microfilm at speeds up to 20,000 characters per second. This matches computer output speeds.

A complete page of data, containing as many as 8064 characters, can be reproduced "with graphic arts quality" in approximately one-half second, in a single 16mm microfilm frame. Any desired background format, such as statement, bill or accounting forms, may be optically combined with the output of information so that the data can be reproduced in final finished form.

Peripheral equipment for on-the-spot high-speed film processing, and continuous or selective hard-copy facsimile production from the film, will be available, in addition to visual film reference work stations, to provide maximum practical versatility.

Point plotting also can be accomplished with the Dacom System photographically and at high speed. No overlays or descriptive labeling are required. Descriptions are automatically recorded. The system can vary between the plotting mode and typewriter simulation at a sustained speed of 15,000 characters per second.

The automatically coded film provides rapid retrieval and reference, and simplifies the handling of computer output by replacing voluminous paper with film records. Applications of the system include all areas which now use large-scale computers, such as for premium billing and policy status records in insurance companies; billing and recording complete customer histories in public utilities; customers' statements, merchandise control, accounts receivable and other large volume record keeping in retail establishments. **For More Information Circle No. 107.**

The Recordak Dacom System, for high speed recording of information from computers. It translates information from magnetic tape to plain language on microfilm at up to 20,000 characters per second, operating at a speed compatible with output of most computers.

Computer Tape File Rolls Where Needed

A MOBILE ROTARY file on a roll-away cabinet, designed to keep data processing tape neatly stored and immediately accessible anywhere in the computer room, was announced by Acme Visible Records, Inc., Crozet, Va.

The unit can be easily wheeled to computer for use. The file revolves a complete 360° bringing tapes within fingertip reach from any position, and holds the reels of tape compactly in metal cases, where they can be visibly coded for immediate reference. Less active tapes can be stored in lower drawers of the cabinet. A top drawer keeps small reels filed in a storage grid. The closed cabinet harmonizes with other office equipment. When not in use it may be rolled out of the way. **For More Information Circle No. 197.**

The Typetronic

THE TYPETRONIC 6615 electronic computer with typewriter input-output was announced by Smith-Corona Marchant, Inc., New York. The electric typewriter, with 15″ carriage, is connected to the transistorized arithmetic unit which computes, stores and prints information. As operator prepares a form, computing unit does the necessary calculations and prints results automatically. There is no need for operator to move to a separate keyboard for numeric entries.

A variety of computation and information storage is provided by a magnetic disc with nine recording heads. Entries may be made or transferred to one or more storage points simultaneously. The most complicated computations and transfer requires slightly over one second and simple calculations may

This plastic program card controls the transistorized Typetronic 6615 computer which has typewriter input-output. Calculations and results are printed automatically.

Computer and Tape-Card Writer

take as little as 17/1000 second.

The 6615 requires no airconditioning or special electrical current. Typewriter output rate is approximately ten characters per second. System controls and signals are located within the keyboard area. A plastic (Mylar) program card (16" x 5½") is used for automatic programing control.

Also announced was the Typetronic 2215 automatic forms writing system consisting of an electric typewriter, with electronic components, activated by punched tape or edge punched cards at a rate of over 100 words a minute. Variable data is entered manually through the typewriter keyboard. The 2215 includes one or two punches which automatically store data on edge punched cards or punched tape for future automatic processing. The punch also can make its own feed holes in cards.

The Typetronic 2215 and 6615 are both practically identical in outward appearance, finished in neutral colors to compliment contemporary office decor. Both are compact work stations requiring minimum floorspace. They are sold complete with a console desk which houses the electronic system and punches, and provides a sizable working surface for the operator. Separate stands or tables are not required and electric input-output typewriter is mounted in the top of the desk like a secretarial machine.

Typetronic equipment ranges in price from $4000 to $9000 in accordance with user's specific needs. It is also available on a lease basis. **For More Information Circle No. 176.**

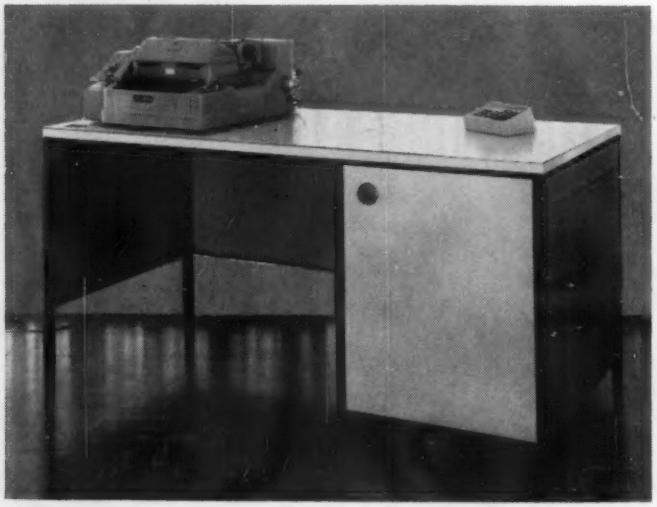
The Typetronic 2215 automatically reproduces standard repetitive data at more than 100 words per minute. Fully transistorized, the unit is activated by punched tape or edge punched cards. Here, operator checks code on punched tape inserted in electronic reader. Entering variables is the only manual typing required.

The Recomp III Computer

THE RECOMP III is a general purpose digital computer made by the Autonetics Div., North American Aviation, Inc., Long Beach, Calif. This transistorized unit offers 32 instructions: four arithmetic, 23 logical and transfer instructions and five input-output. In addition, five built-in floating point instructions are optional. The computer's rotary magnetic memory disk can store 4096 40-bit words including sign, plus 16 words in high-speed memory loops. Each word holds up to a 12-decimal digit number, eight alpha characters and two program instructions.

Average access time to main memory is 9.3 milliseconds with 0.95 millisecond average reading time for loops. Fixed point operating times, excluding access, are 0.54 milliseconds for add-subtract; 10.8 for multiply, and 11.1 for divide. Times for the optional floating point operation (excluding access and normalization time) are 1.1 milliseconds minimum for add-subtract; 12.4 for multiply; 12.7 for divide.

The Recomp III uses a Flexowriter for input-output with computer's mechanical reader taking ten characters a second, but up to four addressable inputs can be used, including Facitape reader with speed of 600 characters a second. It will punch paper tape with output at ten characters a second or feed out to any four addressable outputs, including Facitape punch at 150 characters a second. The low-priced Recomp III is 30″ high, 30″ deep and 60″ long; weighs 250 lbs., operates on 115-volt, 50-60 cycle AC, draws 350 watts. **For More Information Circle No. 102.**



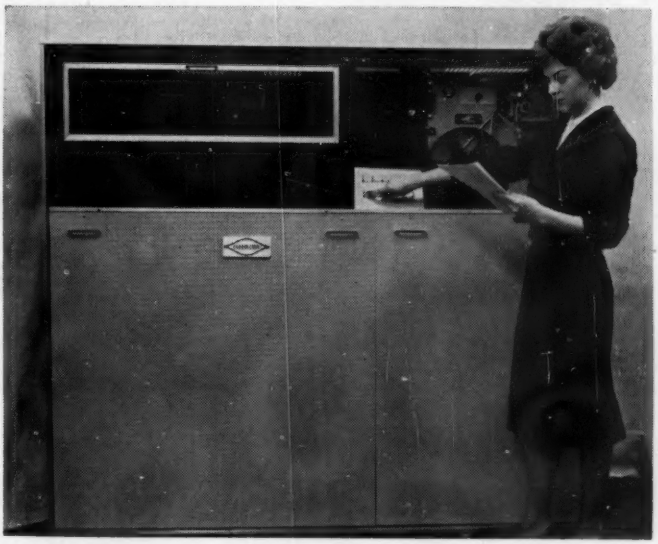
The low-cost, general purpose Recomp III computer is made by the Autonetics Div. of North American Aviation, inc.

Alphanumeric Page Reader

THE FIRST alphanumeric, transistorized, commercial page reader for data processing was announced by Farrington Mfg. Co. of Needham Heights, Mass. The initial advanced Farrington Optical Scanner coming off the production line of its subsidiary, Intelligent Machines Research Corp., Alexandria, Va., scans ordinary business documents and instantaneously translates the information it reads into punched tape at 240 characters per second. Other Farrington machines now being built will be capable of a 340-character rate of output when magnetic tape is used.

Although some 40 Farrington reading machines are being used by U. S. and Canadian industries in mass billing and cash accounting systems, the new model is the first commercial machine to read and digest entire pages of copy. Its predecessors handle single lines of type—usually account numbers.

Insurance and utility industries are undertaking full-scale utilization of Farrington Optical Scanners. Time, Inc., will shortly install in Chicago two commercial alphanumeric page readers for subscription fulfillment work. Farrington will deliver optical scanners this year, to read premium due notices returned by policyholders with payments, to Mutual Benefit Life Insurance Co. of Newark, N. J.; St. Paul Fire & Marine Insurance Co.; Northwestern Mutual Life Insurance Co., Milwaukee; Mutual Benefit Health & Accident Assn., Omaha; Franklin Life Insurance Co., Chicago; and Mutual Life Insurance Co. of N. Y., while



Patricia Phillips starts the Farrington Optical Scanner, a commercial alphanumeric reader which can scan full typewritten pages and instantaneously translate what it reads into punched tape for computer or other data processing use. It reads 240 characters, or 2½ lines, a second.

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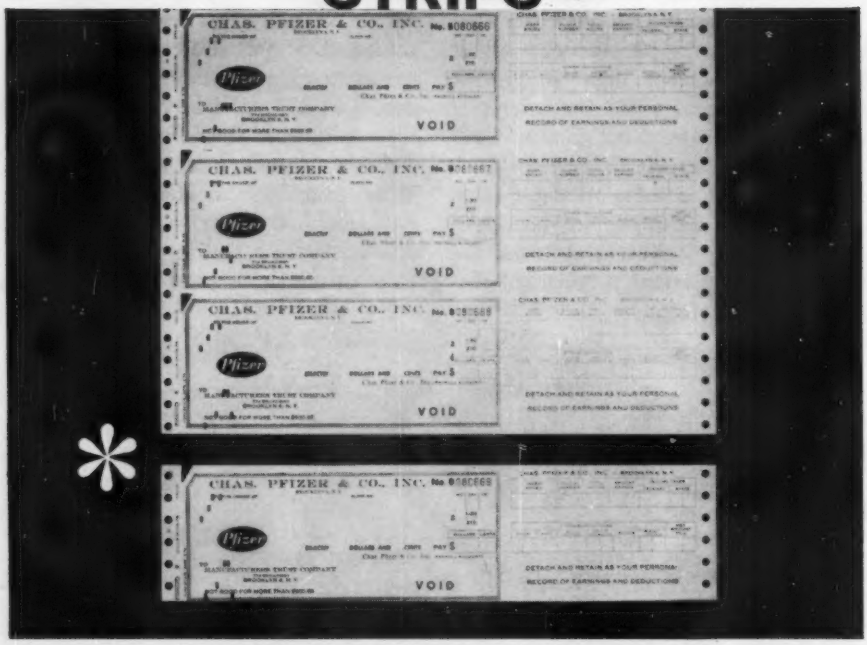

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For More Information Circle No. 297

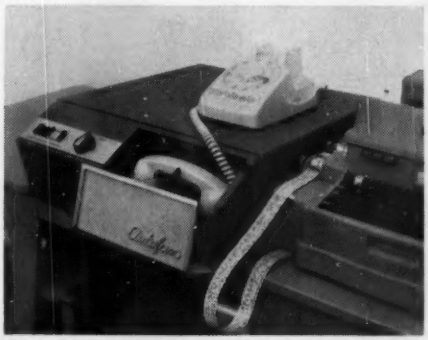
several other insurance companies are interested in the alphanumeric page reader which can read a whole insurance policy and instantaneously translate the desired information into machine language.

Five major utility companies have ordered machines to scan the customer bill stubs returned with payment. The payment is then posted to the customer account electronically. Stubs are read at upwards of 100 a minute. In this application, Farrington scanners will create input for all major computer systems. The utilities with optical scanners on order include Southern California Edison Co., Los Angeles; Commonwealth Edison, Chicago; Consumers Power Co., Jackson, Mich.; Detroit Edison Co.; and Cleveland Electric Illuminating Co. Farrington Optical Scanners are both leased and sold. Sale price on page readers range from $95,000 to $175,000; basic machines range upwards from $60,000. **For More Information Circle No. 180.**

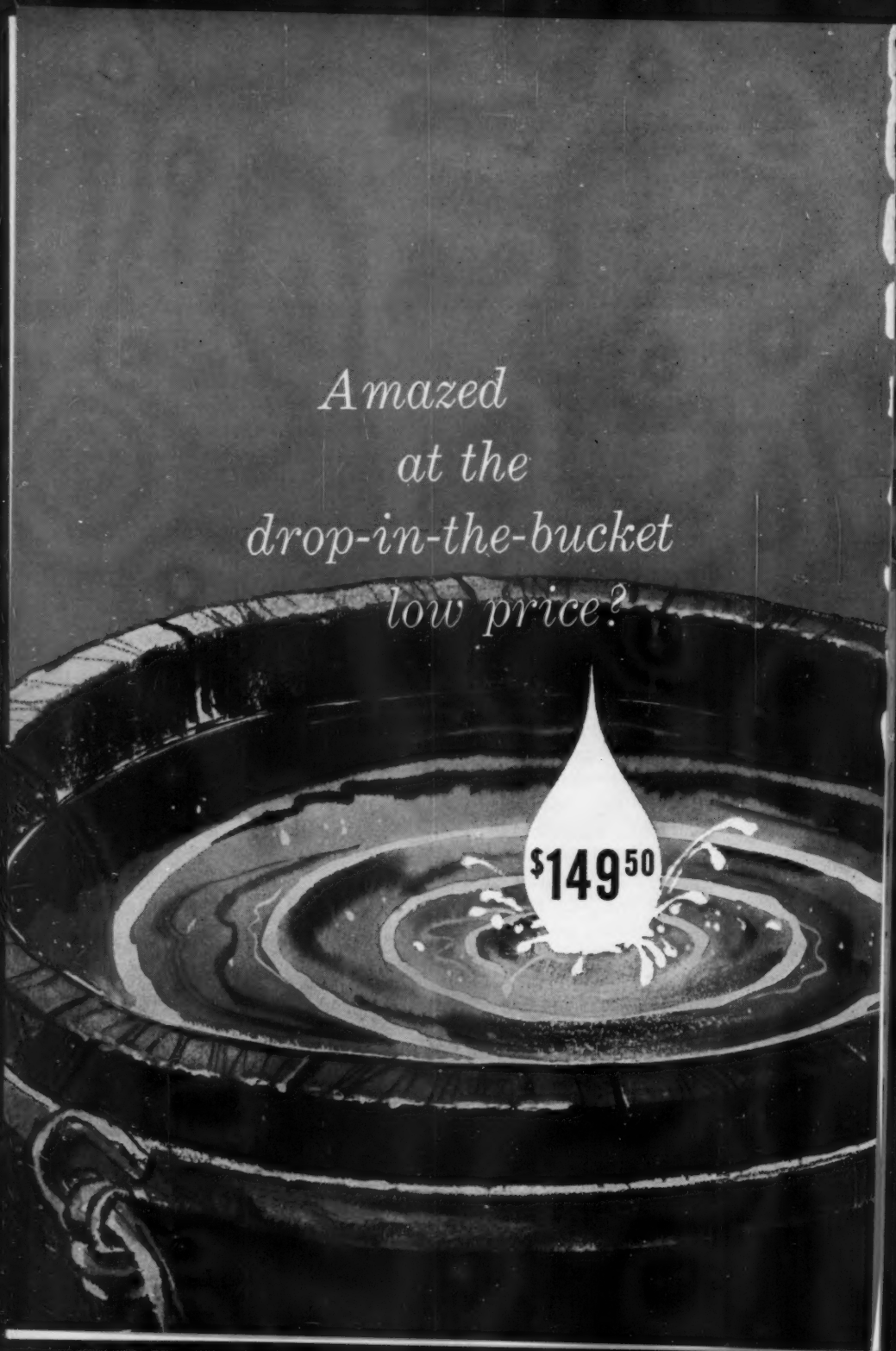
Transmits Data Via Telephone

AUTOFAX is a system which allows sending and receiving coded data over regular telephone lines via conventional telephone hand-sets. Produced by Communications Control Corp., Van Nuys, Calif., the system comprises a transmitting and receiving assembly. Original alphanumeric data is typed on a Flexowriter which produces a hard copy and a punched tape. At selected intervals, the tape is fed to a transmitter which converts it into audible tones and transmits it over the phone at over 100 words a minute. The receiving unit punches an identical tape for use as computer input or to operate tape actuated equipment. Any presently installed telephone hand-sets can be used to send and receive data in binary codes.

The Autofax has wide applications for centrally processing data received from any number of remote locations, such as branch offices, without the need for additional telephone company equipment. A large midwest chain store organization is using the system to connect its branches with a central computer, for daily updating of all records and automatic writing of forms such as invoices. Complete equipment including Flexowriters was installed on a five-year lease plan which includes maintenance. **For More Information Circle No. 109.**



The Autofax transmits and receives punched tape coded data via any ordinary telephone.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For More Information Circle No. 439

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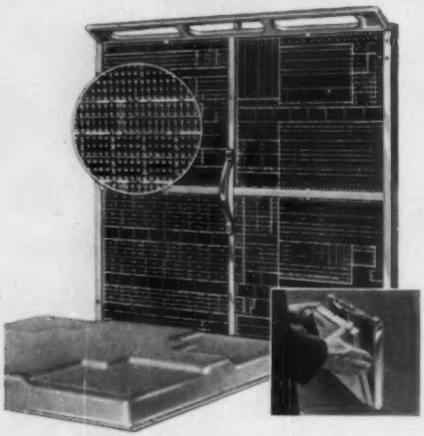

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For More Information Circle No. 307

To Double Univac Speed

A PLAN was announced by the Remington Rand Univac Div., Sperry Rand Corp., to permit users of Univac File-Computers to double the data processing capacity of their present systems, at no increase in rental charges. It also allows users to purchase their rented computers on a deferred payment plan, at reductions approximating 40% of original list price.

The processing speed of existing Model 1 File-Computers can be doubled by replacing the present magnetic storage drum with a magnetic core memory which is primarily the same as that of the large-scale Univac III system, having a capacity of 2000 12-character alphanumeric words. "This field installation plan is in line with our policy of offering Univac customers the advantages of latest developments in the computer field," Jay W. Schnackel, vice president and general manager of the division, said. "In a typical application, a 100% increase in operating speeds is obtainable with no modification in existing programs and at no extra rental cost."

Terms of the plan call for a two-year extension of existing rental contract, from the date of installation of the new magnetic core unit which can be installed over a weekend, the company said. The purchasing arrangement would provide three, four or five years of deferred payments. The actual price of the Univac File-Computer system in each case will be determined by the age of equipment at time of purchase. The new magnetic core will cost approximately $100,000. **For More Information Circle No. 105.**

BURNED CRASHED FLOODED

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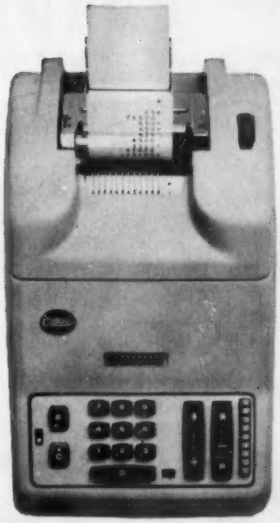
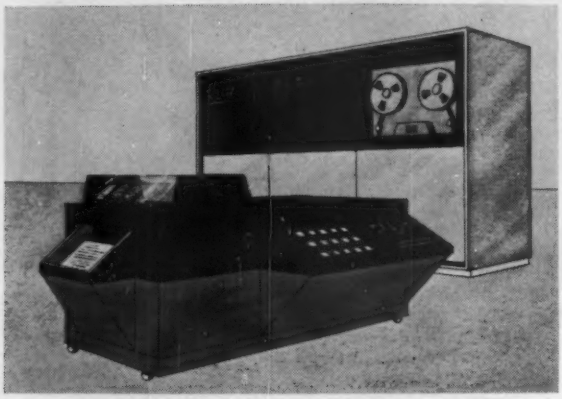


For More Information Circle No. 203

Character Reading Machine



The Rabinow Universal character reader is designed to read the typing or printing on your forms.

A CHARACTER READING machine called the Rabinow Universal Reader is announced by Rabinow Engineering Co., Washington, D.C. It utilizes an electronic pattern matching technique which allows it to operate at speeds limited only by those of paper handling methods. The output of a bank of photocells is sampled with results stored in a flip-flop matrix. Then

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For More Information Circle No. 371

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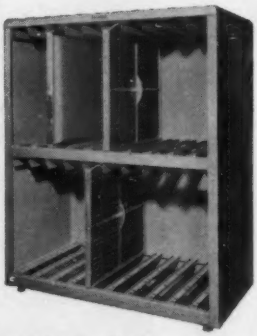

The nylon rollers make board access and storage virtually a one finger operation.

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Model 4071 40" Wide: 22" Deep; 48" High; Shipping Wt. 195 lbs.

The newest and most practical idea in 407 type panel storage Stores 20 panels in less space.

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For More Information Circle No. 372

outputs are compared electronically with a group of master matrices, each of which contains an individual character for recognition. Comparisons are made in parallel and it is stated that machine has read as many as 2500 characters per second.

Master matrices are custom made from the one or more typewriter or printing type fonts commonly used on the forms at the installation where machine is to be used. Because of the machine's resolving power and built-in logic, it is said to be able to read relatively poor reproductions such as may appear on carbon copies. Different types of document feeding equipment are available: single line, continuous strip and full page readers. Forms may be in multiple attached sets or single sheets—whatever style is currently used. Electronic output of the reading machine can be delivered on magnetic tape, punched paper tape or punched cards.

A typical RUR was designed to take 8½″ x 11″ typewritten sheets; read ten digits, 26 letters and 15 symbols at the rate of one complete page in 4.5 seconds (including paper change), and deliver output on 9-channel magnetic tape. It reads a line in 1/6 second.

Another Rabinow reader, at Ryder Truck Lines, Jacksonville, Fla., will read typewritten data on six waybills per second and feed data directly to a computer. The waybills are typed in Ryder branch offices and sent to the Jacksonville office for automatic computation and billing. Such a machine has a wide range of potential applications. **For More Information Circle No. 104.**

tape file

PUNCHED TAPE ACCESSORIES

#5057
High Speed Manual Tape Winder

Saves time in winding, reversing or searching coded tapes. May be adapted for computer reels.

#8060 Adapter

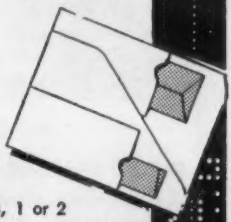
Adapts all "Tape-File" winders and rewinders to RCA 501 and Burroughs 220 reels.

#1157 Manual Tape Folder

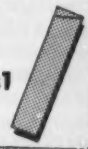
Folds tapes rapidly for filing. Folding arm is designed to fold tapes safely, remove easily.

File Tapes with Documents

Slash front file folder with two pockets for tapes and/or cards.



Oil resistant envelopes, 1 or 2 pocket for tab files.



SAMPLE PACKET —
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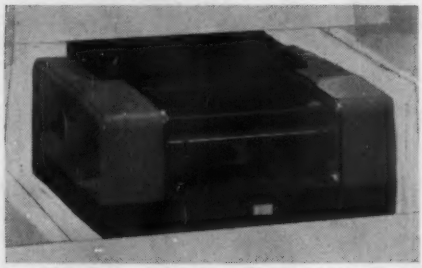
For More Information Circle No. 250

New Products

COPYING MACHINE

Savin Business Machine Corp., 161 Sixth Ave., New York 13, N. Y., announces a desktop electrostatic dry copying machine



that copies anything the eye can see, including colors and ballpen writing, on one or both sides of any type or color of paper. A permanent 8½" x 11" copy is made in ten seconds for about 4c, and it will not flake. The machine also will produce paper offset plates. It can copy from two sides of a sheet onto two sides of any other sheet of ordinary paper. Operates without odor. For volume production, an automatic feed for copy paper is available. **For More Information Circle No. 188.**

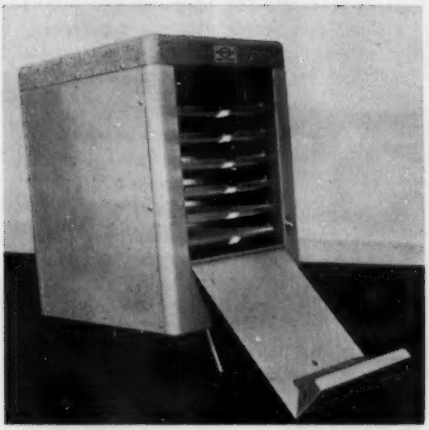
FLEXOWRITER FILE-DESKS

Shaw-Walker, Muskegon, Mich., announces perfected Flexowriter File-Desks to provide 24-hour fire protection for tapes and edge-punched cards at point of use. Heavily insulated, these bear Underwriters' Laboratories One-Hour labels. Made in two models, this Fire-File equipment will house up to 10,000 punched paper tapes. The smaller model shown will fire protect up to 6000 tapes (2000 per drawer). Desks are organized work stations for every Flexowriter machine operation. Shaw-Walker also makes the Simplified Tape-Holder which has an automatic signaling device to speed return of tapes to the file, saving one-third to one-half of the filing time. This year, Shaw-Walker also has a more complete line of time- and space-saving equipment and filing methods. All

are pictured and described in a new color folder, A-253-A-254. For your free copy, **Circle No. 125.**

COLLATOR

Farrington Business Machines Corp., 77 A St., Industrial Center, Needham Heights 94, Mass., announces the six-station desk-top Farrington Gatherer which collates sets of up to six 8½" x 11" sheets at the rate of 20 sets (or 120 sheets) per minute and will intermix a wide variety of paper weights and finishes. Scientifically contoured aluminum feed trays virtually eliminate doubles and misses. A specially designed feed mechanism automatically lifts the pushers from the paper at the flick of a switch so that removable trays may be loaded without obstruction. The Farrington Gatherer may be loaded with one hand. It is built of heavy gauge steel with all corners rounded. Its vinyl-coated top defies dents and scratches. A hinged gathering rack closes to form a dust cover



when machine is not in use. The Gatherer is finished in office blue. **For More Information Circle No. 141.**

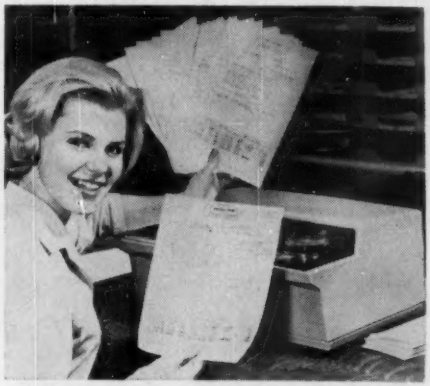
NOISE CONTROL CABINETS

Lee F. Kollie Associates, Inc., 236 N. Clark St., Chicago 1, Ill., offers Lefka Nois-Kontrol Kabinets, custom-made for specific-noise-source office machines in both complete or partial enclosures. Tailored to machine operation, work area and form size of various machines, the cabinets are said to reduce harsh metallic machine noise by 50% with the operator

side open and more when used with curtains or complete enclosure models. The outer shell is made of Textolite, on a reinforced furniture frame, in colors, patterns and wood grains. The body is composed of a Sound-Seal lining plus 2½" of soft Absorbex noise-absorbent acoustical material. There is a facing of plastic upholstery fabric. Cabinets come with indirect fluorescent lighting and standard wiring. Airvents and fans are available as accessories. **For More Information Circle No. 153.**

COPYING PAPERS

Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn., announces development of copy papers that will make black-on-white permanent reproductions in any Thermo-Fax copying ma-



chine at a cost of less than 2c per copy. The new process consists of two papers: Thermo-Fax Type A Pink Systems Paper and Type B White Systems Paper. Type A serves as the original, or master, and is used as any ordinary office paper or form for typing, printing or writing. It erases easily and is perfectly dry and clean. One Type A original may be used to make up to 25 or more sharp, clear, black-on-white copies on the Thermo-Fax Type B paper, which is a high quality, stationery-weight copy paper. The copied image is permanent and may be used as an original document to make an unlimited

number of copies on any other type of Thermo-Fax copy paper. These new systems papers offer complete flexibility in cutting cost of office forms distribution. The pink Type A sheet can be printed with a company letterhead, or for such items as bulletins, reports, requisitions, invoices or other forms. The master sheet can be typed or written on repeatedly to add information to an existing form. Type B paper is inserted along with a Type A master into any Thermo-Fax copying machine to issue bulletins, prepare information copies of letters, distribute the data entered on printed forms and provide permanent, multiple copies of any typed, printed or written information with each copy made in a four-second, one-step process. Cost of the Type A master ranges down to 2.33c per sheet, with the Type B costing as little as 1.84c per sheet. **For More Information Circle No. 138.**

PAPER SHREDDER

Electro-Shred Corp., U. S. 42 & West St., Lebanon, Ohio, introduces the low-cost Electro-Shred to destroy confidential paperwork and obsolete records in privacy.

Papers to be disposed of are fed into the machine and, in a matter of seconds, drop into the wastebasket shredded beyond recognition. Electro-Shred provides an effective, convenient way to prevent discarded confidential information from finding its way into the hands of unauthorized persons. No larger than a typewriter, it operates quietly and is completely safe and easy for anyone to use. Its attractive styling blends with other furniture and equipment in the office. **For More Information Circle No. 122.**

PHOTOCOPIER

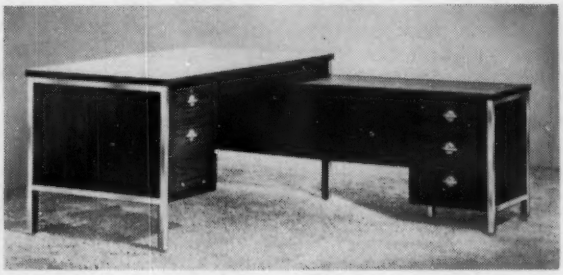
Photorapid Corp., 142 Oregon St., El Segundo, Calif., announces the Electra-Matic photocopy machine, said to incorporate the cleanliness of a dry office

copier with the quality of copies available from wet copying machines. Operators never see or touch the liquid in the Electra-Matic, even when changing it, because it is sealed inside a plastic cartridge. This avoids dripping, spilling and aging before its time. Copies are cleaner and sharper, and developer stays fresh about three times longer. **For More Information Circle No. 154.**

DESKS

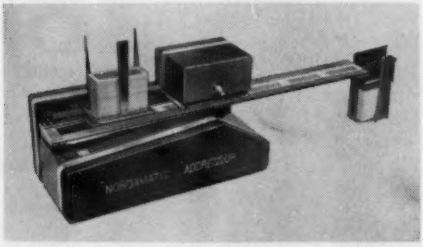
Jasper Desk Co., Jasper, Ind., announces the 14 Series line of completely assembled office furniture utilizing post and panel construction that is crisp, architectural and modular in appearance. Exterior construction is of select flat-cut walnut with oak interiors. Metal leg trim is brushed aluminum or brushed brass finish, as are all drawer pulls which are anchor-type with circular mounting plates. All drawers have side guides and all regular desk drawers are grooved for adjustable partitioning. Tops are available in wood, walnut-grain or white plastic.

Walnut plastic bands are used on all tops except that wood veneer bands are used on oil-finish tops. Finishes are lacquer or oil. Other features include: adjustable levelling glides; locks in each desk pedestal to lock all drawers; no lock on wing pedestal; full suspension file drawers; modesty shield as integral part of both desk and typewriter return. Models include double pedestal conference desk, 72″ x 36″; double pedestal executive desk, 60″ x 30″; single pedestal desk, 60″ x 30″; L-shaped unit return, 42″ x 18″ attached to 60″ x 30″ desk, left and right return; credenza with kneehole space, 66″ x 18″; panel end table, 30″ x 60″. **For More Information Circle No. 166.**



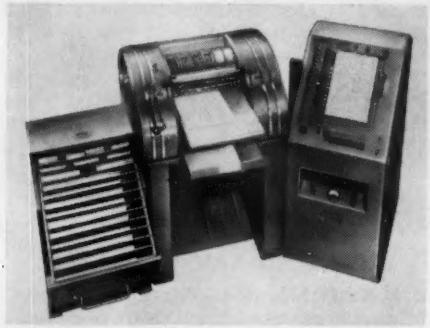
ADDRESSING MACHINE

Nord Photocopy & Electronics Corp., 300 Denton Ave., New Hyde Park, N. Y., introduces the compact, low-cost, electric Nordamatic Addressor which uses stencils made on any office typewriter. The Nord machine is said to be capable of obtaining many thousands of impressions from a typewritten stencil and is designed for printing of up to 120 addresses per minute. The small machine provides automatic adjustment for the thickness of material being printed, and an automatic provision for isolating inking roller when printing cycle has been completed. An enclosed ink reservoir holds a full year's supply. Oscillating ink transfer roller insures even dispersion. Skip-and-reject feature allows selecting and printing certain coded stencils. Easily accessible safety fuse prevents burn-out of motor. Stencils may be reversed in stacking for different systems applications. Complete line of accessories available. Machine retails at $249. **For More Information Circle No. 169.**



SPIRIT DUPLICATOR

Copy-Craft, Inc., 105 Chambers St., New York 7, N. Y., presents the Ormig electronic line selector duplicator which will select electronically from any location on a master any number of lines or group of lines, in whatever combination required, reproducing them in condensed form on the run-offs, without masks, blockouts, strip masters or shingled forms. In addition to individual lines, up to six headings or line groups can be programed for automatic selection. Automatic advancement of one to five lines, together with up to three headings, in one pass through the machine, is another feature. Another device permits posting of selected lines to individual ledger cards. Variable data, such as order number, quantity, date, etc., can be reproduced directly from the variable printing units



built into the drum. This simplifies the reuse of production orders for manufacturing the same items. Automatic reversal of selected lines, by simply flipping a switch, allows all lines which have not been selected to appear on succeeding run-off. Variable printing units are automatically disengaged when posting operation is used. The Ormig Electronic one-writing system reduces cost by eliminating unnecessary rewriting of information from one form to another, speeds processing of paperwork and prevents errors. Information written only once on the master creates all the required documents, selected and full-page copies. Especially designed for automated handling of such procedures as back-orders, production control, order-invoicing, sales analysis, purchasing, breakdown of parts lists, etc. For example, in production control the machine quickly breaks down parts lists into groups such as parts to be manufactured, parts to be purchased and parts in stock. In order-invoicing, it handles partial deliveries by selecting the items delivered and reproducing these on the invoice, shipping and other necessary forms. By flicking a switch, copies are created of back-ordered items as required. Control board has a push-button for each line on the master and a series of buttons to select headings. When a button is pushed, indicator light alongside each chosen line confirms operator's selections. Flicking a switch provides reproduction of entire master. **For More Information Circle No. 124.**

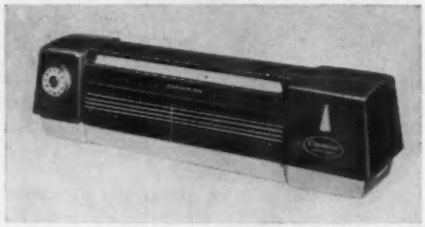
OVERHEAD LAMP CHANGER

Parkraft Mfg. Co., Box 289, Wayzata, Minn., have announced their Long-Arm Lite Tube Handler for servicing overhead fluorescent fixtures containing Slimline lamps. This is said to save up to 50% in time and labor while eliminating accidents and tube breakage. The extendable chrome handle of the tool carries a crossarm containing a series of clips which grip the tubes. Pressure of the clips on the fluorescent tubes can be controlled to grip or release the tube for removing or inserting in the socket. No ladders need be used to bring tubes down for cleaning or replacement. Adjustable handle locks at any desired length for ceilings of different heights. Double wing

nut locks crossarm rigid for use, but it can be loosened and folded for easy carrying and storage. In choice of models for 12, 14 and 16 ft. ceilings at $9.95, $11.95 and $13.95. **For More Information Circle No. 151.**

PHOTOCOPIER

Copease Corp., 425 Park Ave., New York 22, N. Y., announces the Champion 18 photocopier for copying large drawings, blueprints, plans, charts, ledger sheets, 16-



column paper, etc., up to 18″ wide. The extra width also enables two operators to use the machine simultaneously when making 8½″ x 11″ copies, thus doubling production and eliminating wasted time waiting for machine. The machine main-

tains all advantages of the smaller Champion and Comet. The unit will produce photo-perfect, pure white copies of any original printed, drawn, written, in ink, pencil, pen on colored, transparent, translucent or opaque stock. Little or no exposure adjustment is necessary. Posi-Contact insures needle-sharp reproduction. **For More Information Circle No. 453.**

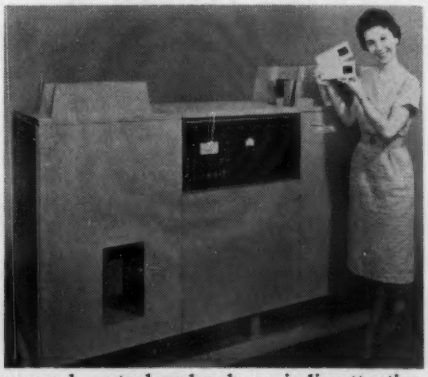
DESKS & FILES

Remington Rand Systems Div., Sperry Rand Corp., 122 East 42nd St., New York 17, N. Y., announces the Belmont line of furniture which is their first entry in the economy market. Desk models include an executive conference desk with overhang top, secretarial model with typewriter pedestal, single pedestal desk, and versatile flat-top desk which can be easily converted into a typing station. Two table models, 60″ x 30″ and 36″ x 24″, have center drawers. Belmont file cabinets are available in two, three, four and five drawer legal and letter size units. Belmont desks have drawers with double wall con-

struction, runners which permit full access to drawers, rubber bumpers, and nylon two-way bearings with positive stops. Leg base is aluminum with adjustable glides to permit an adjustment range of 1″. Center drawer lock locks all drawers with a single turn of the key. Choice of six standard colors, including new Persian gray and sea mist green, with desk tops of linoleum or high-pressure laminate. Belmont file cabinets have a cradle suspension employing six ball bearing rollers, four plain steel rollers and two gravity stops. Each suspension contains rubber bumpers to minimize noise. Frame of cabinet is of lock-weld construction for strength and rigidity. Drawers have latch and aluminum hardware. Positive locking follower block is adjustable to 44 positions. Long-lasting baked-on enamel finish in Persian gray, sea mist green, heather beige, surf green, gray mist, or Gray-Rite. **For More Information Circle No. 132.**

APERTURE CARD COPIER

Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn., announces an automatic aperture card copier for large volume production of duplicate Filmsort aperture cards. The Filmsort Uniprinter 041 makes Duplicard copies of 2000 original aperture cards per hour with a minimum of



manual control and only periodic attention during operation. Multiple decks of aperture cards can be produced quickly and inexpensively for initial distribution to any number of locations. Duplicates of original film can be made for files in new areas where point-of-use reference is desired. Distribution of engineering data for procurement purposes can be speeded by supplying contractors with microfilm copies of aperture cards, cutting time and expense of providing full or half-sized prints. The printer is said to accomplish in one or two manhours what would take upwards of seven manhours using regular reproduction methods. For example, 50 copies each of 40 different drawings (some 2000 copies) can

be produced in a little over an hour, depending upon work program. Machine operates by pushbutton control. Original aperture cards and blank copy cards, stacked in individual feeders, are fed automatically. Cards are separated by machine, with original being restacked and copy card moving through developing section. After copy card is developed, it is stacked automatically. Both originals and duplicates are returned in proper sequence. Duplicards emerge ready for immediate use. The Uniprinter 041 is 53" high, 29" wide, 84" long; weighs 1500 lbs., uses 220 volts, 20 amps, 60 cycle, single phase. Exposure lamp is 2200-watt mercury vapor. Price of machine is $25,000 installed. **For More Information Circle No. 173.**

OFFSET PLATEMAKER

NuArc Co., 4110 W. Grand Ave., Chicago 51, Ill., offers the FT-40 Flip-Top platemaker for all plates up to 30" x 40". The FT-40 incorporates a vacuum frame on top and a carbon arc lamp in the base.

The plate is loaded in the conventional manner, then frame is rotated to face carbon arc lamp. An automatic timer eliminates all manual settings and adjustments. Once timer is set, arc strikes itself and continues to burn without attention until interval elapses. Because light is contained within the base, no curtains, partitions or external exhaust systems are necessary. Pull-out drawer in base makes changing carbons fast and simple. Motor driven arc lamp mechanism offers more stable exposure, constant light value and more uniform coverage. FT-40 M with motor driven arc lamp is $945; with automatic arc lamp, $795. For Bulletin N5000, **Circle No. 126.**

BOND & ONIONSKIN

Eaton Paper Corp., Pittsfield, Mass., announces Eaton's Eterna Bond, a typewriter paper said to last from 300-1000 years. Made according to a new formula to provide protection against the ravages of time, the paper is recommended for important documents, letters and legal

papers. Eaton stresses the fact that Eterna Bond's price is comparable to nonpermanent papers. Eterna is a bright-white sheet, air-dried, with a rich cockle finish. Typing tests have produced clear, crisp letters. All popular sizes and weights are offered: 13, 16, 20, 24 lb. bond and onionskin. **For More Information Circle No. 139.**

POCKET RECORDER

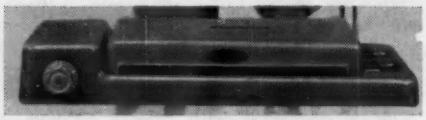
Matthew Stuart & Co., 156 Fifth Ave., New York 10, N. Y., offers a pocket-size tape recorder plus accessories. The Phono-Trix 88 weighs only 2¼ lbs., including

batteries, and measures 1⅞" x 4¼" x 7½". Fully transistorized and operating either on batteries (three C cells and three penlight batteries) or AC, the 88 was designed for economical operation. A 420-ft. reel of standard Mylar dual-track ¼" tape, costing $2.50, provides 70 minutes of recording time and may be used repeatedly; 40 hours of recording time are

obtained from a set of batteries. Standard equipment includes hand microphone with duplicate start-stop controls for remote operation. Accessories include auxiliary amplifier-speaker, leather carrying case, tie-clasp microphone, wrist and pencil microphones, desktop speaker, stethoscope earphones, telephone pickup and amplifier, shoulder holster and AC adapter. Price is $129.95. **For More Information Circle No. 191.**

PHOTOCOPIER

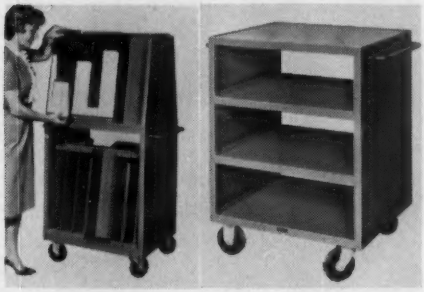
Societe Polyclair, 52 rue de Ponthieu, Paris 8, France, makes the Polymicro, a low-cost photocopying machine in models



for copying documents from 8½" up to 33" wide. Machine's cylinders assure absolutely flat copies on photographic paper. Axel lamp provides constant, unvarying light for printing copies which machine's cylinders deliver absolutely flat on photographic paper. Two rests on either side of the printer's light box allow copying pages in books of any thickness. The model illustrated is 18¾" long, 9¾" wide and 3½" high; weighs 24 lbs. Anyone can use the Polymicro to make quality, photo-exact copies anywhere in the office. **For More Information Circle No. 158.**

VERTICAL TAB CARD TRUCKS

Tab Products Co., 995 Market St., San Francisco 3, Calif., announces a truck system for vertically filed punched cards. The mobile system comprises a four-shelf truck plus a tilted, double-sided Tabtray rack, with optional Tabtray truck with tilted base compartment which accommo-



dates seven trays vertically on each side. The two basic truck models, used with the removable Tabtray rack, provide efficient, complete transportation and storage for vertical card handling. Heavy-duty, high quality steel construction is electrically welded. Hemmed retaining edges on shelves secure trays. Quality five-inch casters, plate type, bolted securely in place, are available on a four-swivel, or two-swivel and two-fixed components. **For More Information Circle No. 133.**

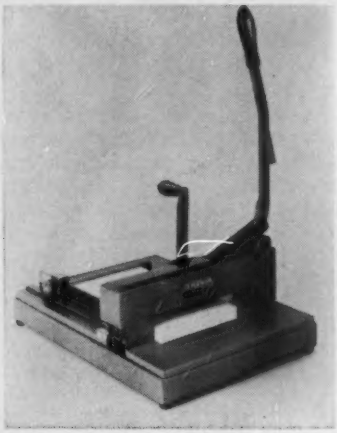
OFFSET INKS

Polychrome Corp., 2 Ashburton Ave., Yonkers 2, N. Y., introduces Chromatone Lithoflex Inks for nonporous printing surfaces such as aluminum foil, vinyl, glassine, acetate, pyroxylin and other types of plas-

tics. These materials cannot absorb ink, so it must bind firmly to the surface in a hard, rub-resistant film. It is also recommended that press operator maintain minimum ink-water, and use an additive (such as Fountain Drier No. 304) with the fountain solution, to aid ink drying by minimizing retarding effects of fountain solution. Printing on nonporous surfaces is complicated by the use of smooth presensitized plates. Polychrome Granekote plates have a finely grained surface which allows printing with the least ink and water. The binding and rub-resistant qualities of Lithoflex Inks make them suitable for cast-coated papers where extra hardness and scratch resistance are needed. Inks come in eight colors plus black and white. Since all plastic surfaces will not accept ink impressions via the offset process (in some vinyls, a plasticizer prevents binding and drying), it is wise to submit samples to the ink supplier for testing. **For More Information Circle No. 146.**

PAPER CUTTER

Michael Lith Sales Corp., 145 West 45th St., New York 36, N. Y., announces that the low-cost Triumph Jr. office paper



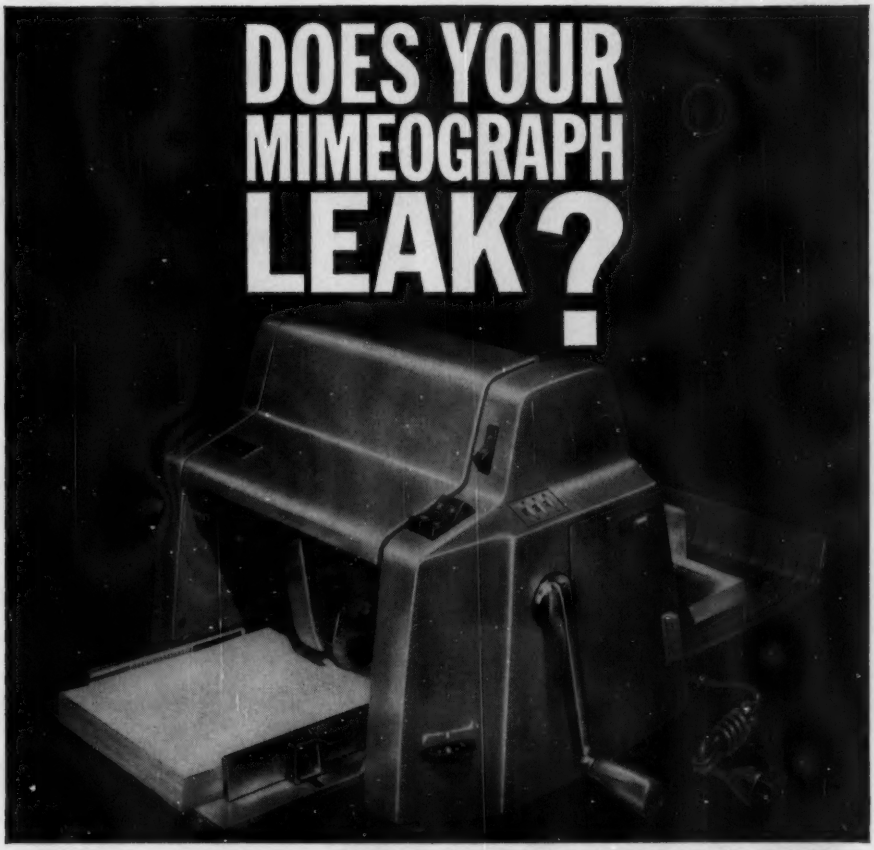
cutter offers simplicity and speed of operation because there is no wheel to clamp and unclamp paper before and after cutting. One motion clamps and cuts the paper. For safety, both hands must be used to operate machine: one on the clamp handle, the other on the blade handle. This procedure automatically locks and unlocks the safety latch. The Triumph Jr. is fast, safe and easy to use, has 10″ cutting width, 1¼″ cutting capacity (thickness), 12″ inside cutting length from knife to backgauge. Backgauge is easily removed to cut any length. The Triumph Jr. costs only $119 f.o.b. above. **For More Information Circle No. 149.**

PAPER SHREDDER

Industrial Shredder & Cutter Co., 103 Mill St., Salem, Ohio, offers the Auto-Shred for use directly in the office or department where proper supervision of records disposal can be maintained. This simplified, economical machine for preventing unauthorized persons acquiring

engineering data, sales and accounting records, cancelled checks, style sketches, mailing lists and other confidential papers, utilizes an automatic feed with 10″ throat, housed in a fiberglass case mounted on a matching metal base containing a lightweight aluminum collection bin for neat, clean operation. Bin will hold up to seven normal-sized wastebaskets of paper, and need be emptied only when convenient. Base is equipped with casters so that it can be rolled easily. The automatic feed hopper eliminates constant hand feeding. Up to 100 sheets of loose papers, cards or

DOES YOUR MIMEOGRAPH LEAK?



Does your secretary get messy whenever she uses the mimeograph? Does she have to clean it for each job even when you're rushed? Are copies fuzzy and indistinct? If your answer is yes, **see the new Bohn Rex-Rotary** twin cylinder, paste ink mimeograph. It's the first really clean mimeograph; never leaks, stays clean, always ready for instant use. Always produces clean, sharp, printing-press quality copies. AND it sells for far less than other first quality mimeographs. Mail this coupon **today.**

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New York 16, N.Y.

☐ Please arrange a demonstration in our office without obligation.

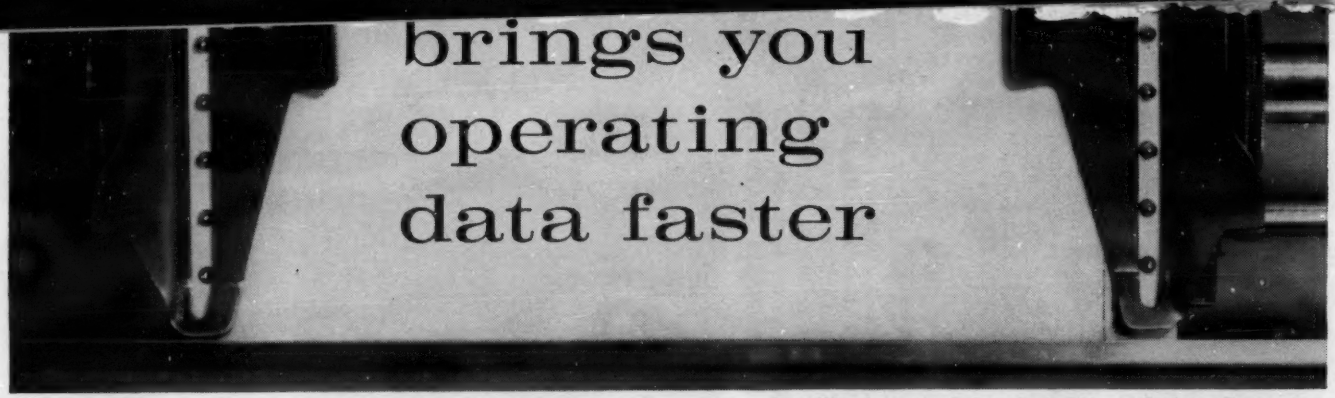
☐ Please send further information, including portfolio of samples printed on the Bohn Rex-Rotary.

NAME_____ COMPANY_____

STREET_____ CITY_____ STATE_____

For More Information Circle No. 438

This
revolutionary
new form



Speediflex is a patented product of Moore Business Forms, Inc.

Faster reports permit no interruptions in machine runs. Moore's Speediflex removes much of the forms-handling trouble that has caused interruption, delay and 'down time.' It is a new positive control in achieving trouble-free runs, simplified handling and, very often, savings.

These benefits are due to a special flex-cut construction built into Speediflex. It lets continuous forms flow freely and naturally, with no wrinkling or tearing, and without the 'tenting' and 'peaking' that cause trouble. Printing in perfect register, on every copy, is possible because there is exact part-to-part alignment of parts at the point of writing.

These are a few of the Speediflex benefits Moore men are demonstrating in business offices throughout North America. A Moore man will be glad to drop in on you—just write the nearest office.

Build control with MOORE BUSINESS FORMS, Inc.
Niagara Falls, N. Y. • Denton, Texas • Emeryville, Calif.
Over 300 offices and factories throughout the U. S., Canada, Mexico, Caribbean and Central America.

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For More Information Circle No. 469

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cheaper

faster

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Have you ever tried *Electric Stapling?*

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Staplex does every stapling job in less than half the time and costs so little to own. Let us show you today how Staplex increases work output while it saves you valuable time and money.

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World's Largest Manufacturer of Electric Staplers

For More Information Circle No. 417

tickets can be stacked in the hopper. Stapled, pinned or folded papers can be fed through a separate gravity hand feed which operates simultaneously with the automatic feed. Papers are shredded beyond reconstruction into ¼″ strips. Clips and pins are cut without damage to cutter. Geared drive allows use of 1/3 hp. motor on any 120-volt line with no danger of overloading electrical circuits. All operating mechanisms are completely enclosed to make machine safe for operation by anyone in the office. Unit is furnished complete, ready for immediate use. **For More Information Circle No. 148.**

TELEPHONE SCRAMBLER

Delcon Corp., 943 Industrial Ave., Palo Alto, Calif., makes a telephone speech scrambler for use with standard telephone instruments. Weighing 27 oz., it may be carried in a pocket or briefcase. Resembling a slightly oversized telephone handset, the scrambler requires no wires or

other connections between itself and the phone. The user places the Delcon device against the handset and holds the two instruments together when he wishes to scramble a confidential conversation. Internal batteries furnish power for the ten-transistor circuit which transforms ordinary speech into incoherent gibberish. Only a second matched Delcon scrambler

Records and information on microfilm are found fast—and put to use in seconds with a THERMO-FAX "Filmac" Reader-Printer. There's no waiting for copies, no tedious typing; transcription errors are eliminated.

For filing and finding...

FILMWORK IS EASIER THAN PAPERWORK

Filing and finding facts—the biggest paperwork problem in business and industry—is being solved today by substituting filmwork for paper work.

Filmwork is easier than paperwork. Microfilm records are more accessible than paper records because in 4% of the space you can have 100% of the records. More records can be kept close to people that need the records.

Filmwork is faster than paperwork. Microfilm can be indexed so that filmed records can be located more easily and quickly than paper records.

Filmwork costs less than paperwork. Microfilm savings are not only in space. Low cost copies from microfilm eliminate chargeout systems, resorting, refiling, and all the other work that is necessarily repeated over and over again with paper.

3M makes microfilm easy to use

Filmwork became practical for business and industry only a few years ago when 3M introduced the THERMO-FAX "Filmac" Reader-Printer. For the first time a reader and a printer were combined in one compact, low cost unit—and work-size prints from microfilm became almost instantly available to anyone. There's a "Filmac 100" Reader-Printer that has a bright viewing screen, simple pushbutton operation, and makes clear copy after copy in 8½" x 11" size of microfilm in rolls, jackets, and FILMSORT Aperture Cards. A "Filmac 200" Reader-Printer delivers prints up to 18" x 24" in seconds.

"Filmac" Reader-Printers make filmwork practical for any size business and industry. With a THERMO-FAX "Filmac" Reader-Printer you can take more than a look—you can take a low cost copy in seconds.

Get the proof!

Get the proof 3M makes microfilm so easy to use. Find out how you can speed up filing and finding facts with 3M Microfilm Products. For a free copy of "How to Put Microfilm to Work", mail coupon.

Please rush me ☐ information on how 3M makes microfilm so easy to use, ☐ free copy of "How to Put Microfilm to Work."

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For More Information Circle No. 215

THE HAMILTON RITE-COPY LINE

CUT-SIZE PAPERS — 226 DIFFERENT ITEMS!

...and they're all HAMILTON QUALITY

Business Papers: Hamilton Bond, Mimeo, Duplicator; Montgomery Bond, Mimeo, Duplicator
Text and Cover Papers: Hamilton Andorra, Hamilton Kilmory
Vellum Papers: Hamilton Starwhite; Hamilton Vellum Opaque; Hamilton Vellum Cover
Offset Papers: Hamilton Offset, Test Offset

Standardize on Hamilton Rite-Copy Papers—one broad *quality* line for all duplicating-machine uses. You get 13 mill-brand papers in white and colors, with many weights and in practical sizes from 8½" x 11" to 11" x 17". They're all cut to the right size and press ready . . . many 3-hole punched and Mylar* reinforced. They're all in new, colorful, moisture-proof packages. And there's *no increase in price!* See your Hamilton merchant.

HAMILTON PAPERS

Hamilton Paper Company, Miquon, Pa.
Mills at Miquon, Pa., and Plainwell, Mich.
Offices in New York, Chicago, Los Angeles

*Du Pont Registered T.M.

For More Information Circle No. 305

at the other end of the line will translate the conversation back into normal speech. Model 105 permits either person to speak at any time without pushing a button, and is $219 per instrument; Model 104 requires user to push a button before speaking and is $159. **For More Information Circle No. 186.**

STORAGE FILE

Lennox Distributors, Box 483-H, Massillon, Ohio, announces Super-Strength Pyramid drawer-and-shell storage files made of 350 lb. test fibreboard with double-thick supporting sidewalls. Steel reinforcement at the front locks for permanent stacking and durability. Pyramid files are shipped and stored flat, saving 75% of storage space and reducing delivery costs.

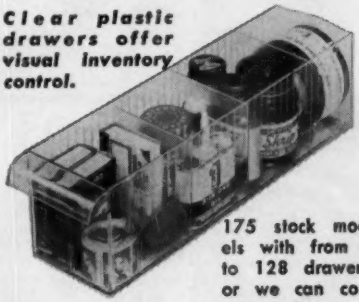
Assembly is simple since all important joints are pre-stapled at the factory. A lead pencil is the only tool needed to assemble. Pyramid files embody many features of metal files: stacking guides, drawer stops, recessed drawer pulls and card holders. Bases, follower blocks and a full line of optional accessories are available. Pyramid storage files provide orderly, accessible, permanent records filing at low cost. Popular size sells for $4.15 in most areas. Designed and produced by Convoy,

FREE!

The perfect cabinets for storing small OFFICE SUPPLIES

This new catalog illustrates the efficient and scientific storage of small items. This proven system CUTS COSTS by saving time and space.

Clear plastic drawers offer visual inventory control.



175 stock models with from 6 to 128 drawers, or we can construct to your specific needs.

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WRITE FOR FREE CATALOG TODAY!

AKRO-MILS CABINETS

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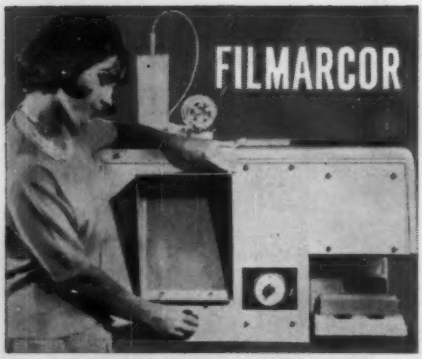
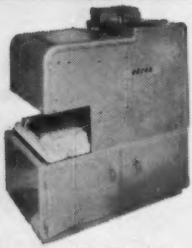


AUTOMATIC MICROFILM READER-PRINTER

Automatically makes a cut, letter-size print of outstanding quality from 16 or 35 mm microfilm in 20 seconds. Anyone can use the desk-top Filmarcor, under any lighting conditions, to produce 60-70 prints an hour.

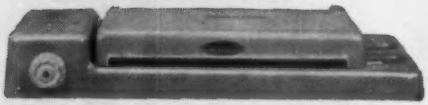
ARCOR

Electronic Automatic Photocopier



Produces perfect, true photo-exact copies of any document at the rate of six a minute—all automatically—just press the button. All office personnel can use the Arcor Electronic for multiple copying of any subject matter including all colors.

POLYMICRO Photocopier



Handsome, compact, economical. Makes photo-exact copies — anywhere, anytime. Copies all colors. Various models capable of processing paper from 8½" up to 33". The smallest office can profitably use the Polymicro.

U.S. agents sought for this highest quality equipment which is now distributed throughout the rest of the world.

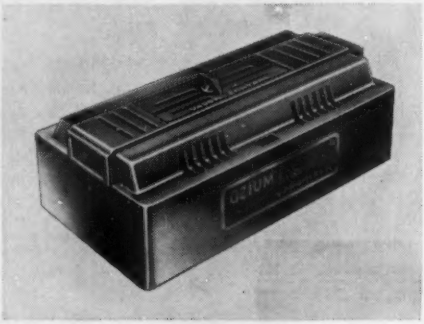
★ Societé POLYCLAIR
52 rue de Ponthieu, Paris 8, France

For More Information Circle No. 271

Inc., Canton, Ohio, makers of Chem-board rigid storage files. **For More Information Circle No. 147.**

AIR PURIFIER

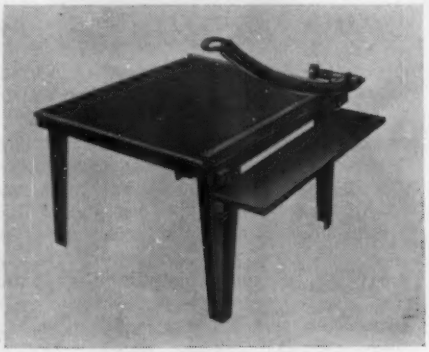
Woodlets, Inc., 2048 Niagara St., Buffalo 7, N. Y., announces the No. 2500 Ozium vaporizer which will help to reduce



the danger of airborne infection when used continuously in accordance with directions. Odors and smoke are noticeably cleared up when Ozium vapors are released. The vaporizer continually releases sufficient vapors to treat an area up to 2500 cu. ft. One pint of Ozium concentrate will last 30 days, running continuously night and day. **For More Information Circle No. 121.**

CUTTING BOARD

Photo Materials Co., 2100 W. Fulton St., Chicago 12, Ill., announces that an automatic, nonslipping parallel clamp,



HOW MUCH DO YOUR CARBON COPIES REALLY COST?

The hidden element in pinpointing the cost of carbon copies is the number of times carbon paper is used before it is discarded. We've prepared a study to help you determine the cost of your carbon copies. Folder HC-22 is yours for the asking.

You'll discover what more and more firms are learning every day . . . that the most efficient and economical way to produce carbon copies is with Huron Copysette, our patented manifold carbon paper set.

At its new low price, Huron Copysette is America's best office supply buy.

* Licensed under Kerr Patent No. 2,557,875

Available in Canada through
APSCO PRODUCTS, LTD., Toronto, Canada

Patented*
Huron Copysette
PULL OUT Style
MANIFOLD CARBON PAPER SETS

PORT HURON SULPHITE & PAPER CO.
PORT HURON, MICHIGAN

Insist on the finest,
ask for HURON COPYSETTE by name.

For More Information Circle No. 212

ABSOLUTELY!

The Fastest and Easiest Way to

DESTROY CONFIDENTIAL PAPERS

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You positively destroy confidential papers and records—quickly and easily—right in your own office with the new Shredmaster Bantam 10.

Anyone can do it. Handsome and modern design, the Bantam 10 fits your office decor. It's clean and quiet in operation.

Now at a new low price. (Other models of greater capacity available.)

FREE: Illustrated descriptive folder giving details of **free** trial. Just write today to:

THE SHREDMASTER CORPORATION

Dept. A-3, 384 Woodcleft Avenue, Freeport, New York

For More Information Circle No. 207

actuated by the cutting blade, is now available on its low-cost, heavy duty cutting board. Hardened tool steel blades on both cutting blade and bed give the No. 36 Cutting Board long and dependable life. Both blade and bed are detachable for sharpening easily and quickly. The actuating mechanism brings the clamp down on the material to be cut in such a way as to prevent paper or other material sliding. Because clamp is full length it eliminates any other movement, assuring clean, accurate and uniform cuts. Paper, plastics, light gauge metals, cloth, heavy board and felt can be trimmed to size with the unit, which is available with a heavy-duty table and convenient shelf to catch clippings. Machined markings on face of board provide accurate guides to location of the cut. Tool steel blade has two separate heavy-duty, long-life springs. One keeps blade in true alignment as it cuts and provides self-sharpening action. The other spring acts as a safety, holding blade up until it is brought down to make cut. Blade cannot come down by itself. **For More Information Circle No. 150.**

OFFSET PLATEMAKER

Copy-Craft, Inc., 105 Chambers St., New York 7, N. Y., announces the Copy-Craft Vacuum Frame Printer and De-

veloper for making high quality offset plates in any office, without mess or bother, and at a moment's notice. The light box

save Time . . . and Money with
QUIK-RITE SPEED MESSAGES

Here's the perfect answer for the busy executive. Attractive, low cost SPEED MESSAGES get you an immediate reply. Give you the whole story, too . . . message and answer are on the same form.

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You've never seen anything like it! You get clearer, heavy-weight copies—black or brown—less curl, less crease. Superior contrast, non-glare and non-transparent. Will accept more handling—will endure prolonged exposure to heat and has better file life . . . all this and it costs less. For free demonstration write

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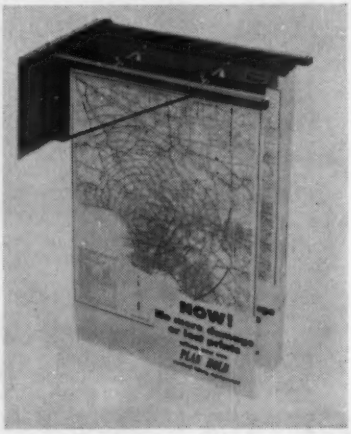
For More Information Circle No. 240

is constructed on the vacuum principle to insure perfect contact every time, producing plates for quality reproduction for both line work and halftones, at 39c each. The resultant saving is up to $3.00 per plate. No additional equipment is required. Plates can be made from any original whether typed, handwritten, drawn or printed, from blueprints and the most difficult paste-ups. Entire process, from original to plate, takes less than a minute. Equipment is so simple to operate that anyone can learn the entire process in a short time. The Copy-Craft offset plate-making two-piece unit can be used for all regular photocopy work as well. **For More Information Circle No. 159.**

SINGLE SHEET HANGER

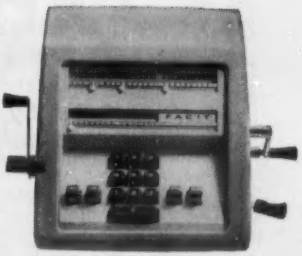
Plan Hold Corp., 5204 Chakemo St., South Gate, Calif., announces a single sheet hanger made of heavy-duty pressboard with a self-adhesive strip already applied. Made in 18″ and 36″ sizes, notched to fit the Plan Hold Single Sheet Rack, hangers can be cut to any lesser length with a scissors. An adjustable size



rack also is available to accommodate 150 hangers of any length up to 36″. Although intended for single sheets, envelopes, artwork, tracings and almost any large sheet material can be filed vertically with the self-adhesive hanger. Pre-drilled holes permit groups of hangers to be fastened to-

DON'T AGGRAVATE YOURSELF!

Replace longhand calculating with the FACIT CM2-16. Save valuable time . . . get fast results with accuracy. The handy manual calculator that's small enough to sit on the corner of your desk, light enough to carry anywhere. "Standard" 10-key keyboard, large (16 digit) capacity. Unique *back transfer* multiplies continuously without resetting! The best answer for every desk. REMARKABLY LOW PRICED! FACIT CM2-16. FACIT, INC. 404 Park Avenue South, New York 16, New York • 235 Montgomery Street, San Francisco.



*Find 3 hidden longhand calculating errors.

For More Information Circle No. 421

No sir! No blur!

COPIES FROM THIS PHOTOCOPIER ARE THE SHARPEST YOU'VE EVER SEEN

PERMANENT, photo-exact, jet black on bone white—acceptable as evidence in courts of law and government agencies. Even makes multi-copies from a single exposure.

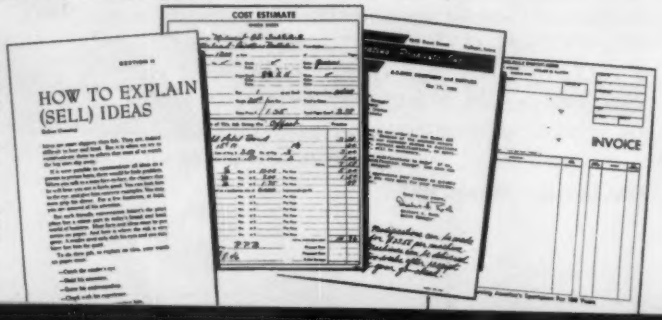
$99.50

At $99.50, you can afford one in every department. The 101 saves "scoots" down the hall to make copies . . . ends delays at central copying departments . . . minimizes retyping chores . . . eliminates dependence on outside copying sources . . . avoids red faces due to typing errors . . . increases efficiency.

Don't be fooled by the $99.50. You can't do better at twice the price. Send the coupon—we'll send proof.

THE 101 MAKES SHARP, CLEAR COPIES OF ANY PRINTED, WRITTEN OR DUPLICATED DOCUMENT, CARBONS, 2-SIDED ORIGINALS, AND TRANSPARENCIES, TOO!

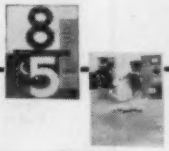
Price shown is manufacturer's suggested retail price subject to change without notice. Other models also available.



Model 101 Photocopier

A·B·DICK®
DUPLICATING PRODUCTS

For More Information
Circle No. 455



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Full price $49.50 with cards

FREE 24-PAGE BOOKLET NO. F-500 Without Obligation

Write for Your Copy Today

GRAPHIC SYSTEMS

Yanceyville, North Carolina

For More Information Circle No. 471

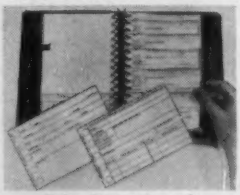
gether with ordinary ⅛" paper fasteners. Tracings and vellums can be reproduced with the sheet hanger attached. Several racks and cabinets are offered for suspending single sheet hangers. The 18" self-adhesive hangers retail at $1.75 per doz. **For More Information Circle No. 144.**

TYPE SPECIMEN BOOK

Fototype, Inc., 1414 W. Roscoe St., Chicago 13, Ill., offers a 68-page type specimen book which illustrates over 300 type styles and sizes available in pre-printed, pre-trimmed set-it-yourself alphabets. This is Fototype's biggest catalog and

the first to include Rule-Pak self-adhesive, pre-cut strips of printed typographical rules and borders. A feature of the book is its liberal sprinkling of informational paragraphs with practical pointers on type selection, layout and paste-up procedures. Because it is inexpensive and easy to

INCREASE DATA KEEPING EFFICIENCY WITH VISI-REF BOOK SETS



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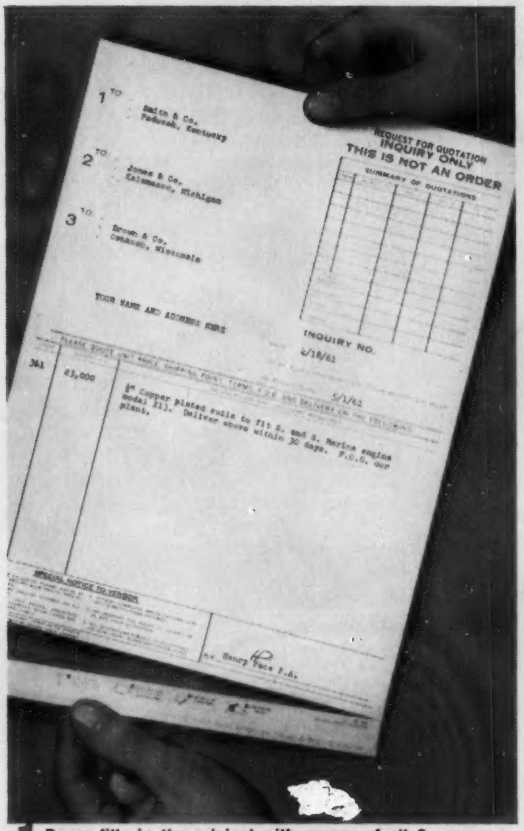
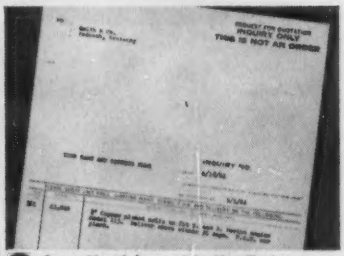
RECORDPLATE, Dept. O, 130 N. Fair Oaks Ave., Pasadena, Calif.

For More Information Circle No. 367

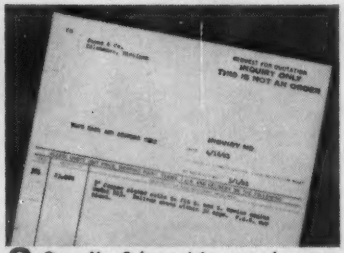
How Wilson Jones Stock "Snap-A-Way" Request For Quotation Form Saves You Time And Money



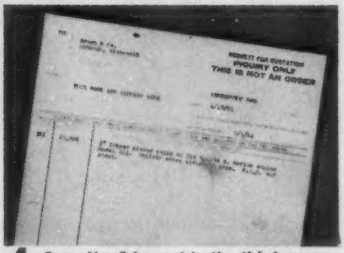
1 Buyer fills in the original with names of all 3 sources invited to bid. Note space for recapping all bids received.



2 Copy No. 1 is sent to the first source, for example: Smith & Co.



3 Copy No. 2 is sent to second source: Jones & Co.



4 Copy No. 3 is sent to the third source: Brown & Co.

ASK FOR 3 BIDS WITH 1 TYPING. This new 4-part GreyLine "Snap-a-Way" stock form can be used as is or imprinted with your own company name. Each source asked to quote sees only his name and buyer's specifications on his copy, while all 3 names appear on original copy kept by purchaser. Ask your office supply dealer for Wilson Jones form 44-152 or write for free sample on your letterhead.

WILSON JONES

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NEW YORK · BOSTON · ATLANTA · SAN FRANCISCO

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For More Information Circle No. 378

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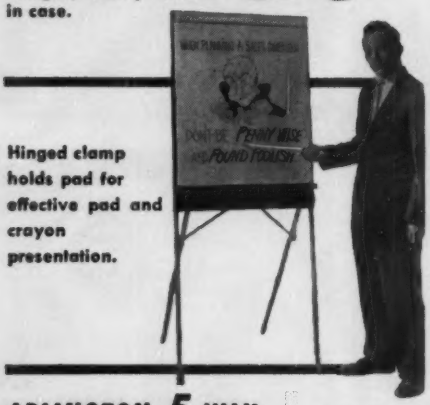
- Paper Pad Presentations
- Blackboard Chalktalks
- Flip Chart Presentations
- Card Chart Speeches
- Flannelboard Demonstrations

Easel, used as chalkboard —folds in a jiffy. Lightweight, easily carried in case.



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ARLINGTON 5-WAY PRESENTATION EASEL $42.50 Less pad

Send for literature

Complete with hinged clamp chalkboard, chalk, eraser.

Four paper pads	$12.00
Flannelboard accessory	7.00
Carrying case	12.50

ARLINGTON ALUMINUM COMPANY

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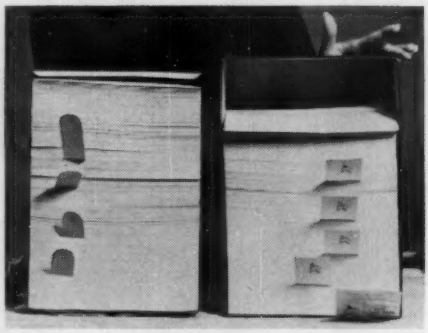
For More Information Circle No. 267

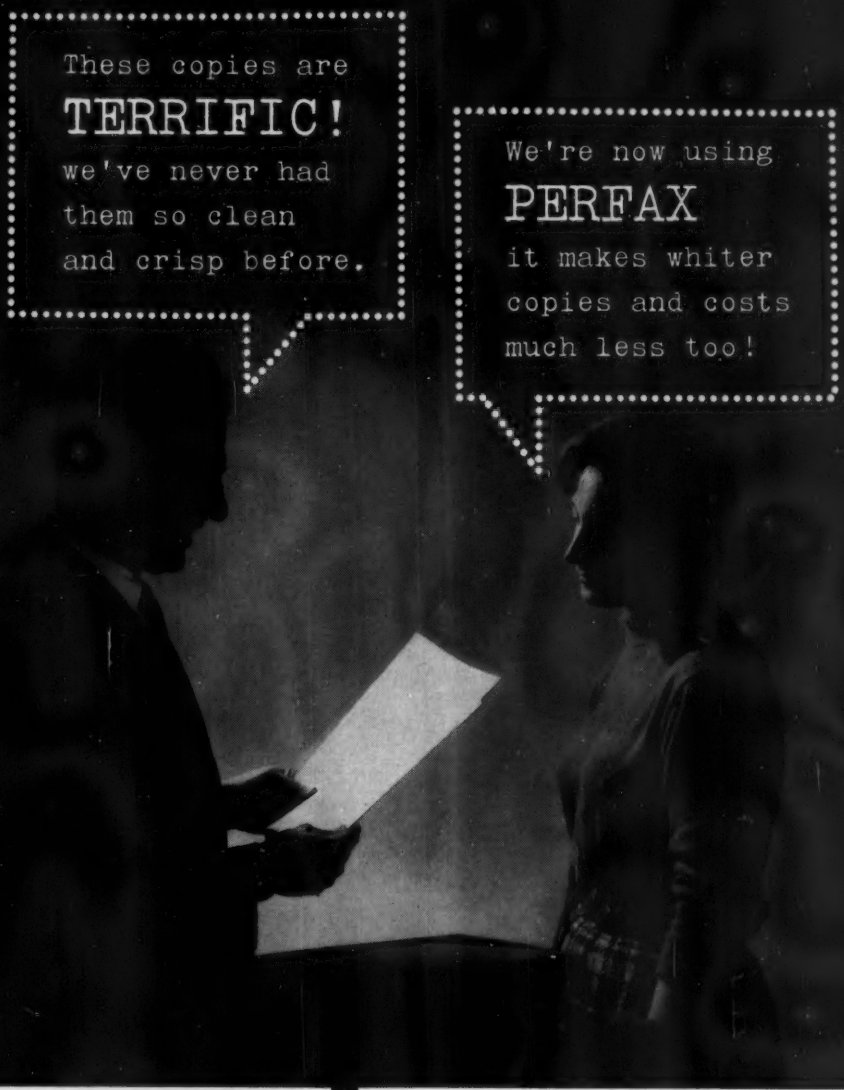
handle, Fototype provides professional results despite limited experience or a short budget. No metal type, inking, proofing nor chemicals are required to set a Fototype heading. Letters are precision-printed on index stock, pre-cut to snap into automatic alignment on an adjustable aluminum composing stick. A strip of pressure-sensitive tape holds the line together as it is trimmed and pasted into position, ready for camera. Results match the appearance of reproduction proofs. Practical applications of Fototype cover display lines and headings for offset printing, zinc etchings, diazo, silk screen, electronic mimeo stencils, TV titles and visual aids. Making needed changes and alterations is particularly convenient. For catalog, **Circle No. 163.**

ENVELOPES

Stein, Hall & Co., 285 Madison Ave., New York 17, N. Y., announces Flash Seal envelopes with a patented adhesive said to be highly resistant to both heat and humidity so that envelopes will stay unstuck and uncurled no matter how long they are stored. The resulting flatness is



said to be of particular benefit to users of inserting and mailing machines. Tests on Bell & Howell Phillipsburg and Pitney-Bowes inserting and mailing machines are claimed to show that Flash Seal envelopes feed with no clogging, jamming or difficulty in stacking. Once moistened by conventional methods, the flat envelopes are said to remain perfectly sealed. Adhesive



PERFAX

the perfect paper
for Thermofax users

BONDWEIGHT • PERMANENT
EASY TO HANDLE • NO CURL
GUARANTEED IN WRITING

For More Information Circle No. 225

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Please rush a trial 500 sheet box of PERFAX thermographic paper at $22.50.

☐ Check enclosed. ☐ Send bill.

☐ Have your nearest representative demonstrate PERFAX on my machine.

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NOW: YOUR SPIRIT DUPLICATING CAN BE AS CLEAN AS THIS PAGE

The degree of cleanliness achieved by new Columbia Plastisol Spirit Ready-Masters was but a few years ago only a laboratory dream and a typist's hope.

This new cleanliness is the product of Columbia research and development. It is obtained by the use of chemically integrated dyes suspended in plastic composition.

In preparation, handling and duplicating of all types of masters from simple carbon units to complex forms for office systems applications and data processing, cleanliness is the word—figuratively and literally.

In addition to cleanliness the user is assured crisp, clear copies throughout the duplicating run. Long highly uniform runs and the ability to re-run are added assets. And the new Plastisol Spirit Ready-Masters go into action immediately—no build-up with the resultant waste of paper.

Whether it's in flat sheets, master units, continuous forms, teletypewriter rolls or interleaved sets, a Plastisol spirit carbon will handle the job. Get this new cleanliness. Get Columbia Plastisol Spirit Duplicating Masters.

For free demonstration consult yellow pages for Columbia dealer nearest you. For further information write to "Plastisol Division" at either address below.

PLASTISOL SPIRIT MASTERS

BY *Columbia*

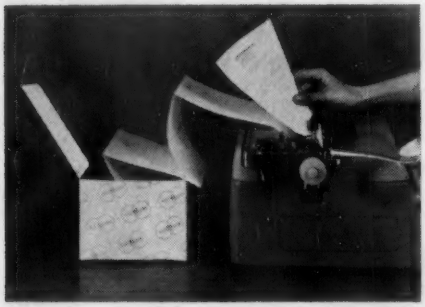
Columbia Ribbon & Carbon Mfg. Co., Inc., Glen Cove, N. Y.
Columbia Ribbon & Carbon Pacific, Inc., Duarte, Calif.

For More Information Circle No. 213

is made from an uncooked dextrine ground to a fine consistency. Applied to envelopes, it is colorless, odorless and tasteless. Imprinting these envelopes can be done at faster speeds and they require smaller boxes and shipping cases. **For More Information Circle No. 137.**

STATEMENT FORMS

Bill-A-pak Co., 2908 Emerson Ave. S., Minneapolis 8, Minn., reports that preparing monthly statements on a Bill-A-pak continuous form can save up to 50% in



time by eliminating the waste motion required to handle and align individual sheets. Imprinted to order, in various layout styles and type setups, these continuous forms cost no more than ordinary statements. **For More Information Circle No. 183.**

OFFSET PLATEHOLDER

Van Son Holland Ink Corp. of America, Union and Liberty Sts., Mineola, N. Y., offers a non-skid plateholder with an automatic lock on the clamp for easy in-

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Whether your job requires a bond, mimeo, offset, duplicating or manifold paper, the MACKINAC line has a paper especially made for your job. All MACKINAC Job-Ready Business Papers are precision cut at the mill to sizes 8½ x 11 and 8½ x 14. MACKINAC VELLUM is made in brilliant White in 40, 50 and 60 pound. All other MACKINAC papers are available in White and six bright colors that match across the line.

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MACKINAC VELLUM

sertion and removal of the plate. The surface is plastic over 3/16″ hardboard, and the plateholder will not move under nard wiping of the plate because a foam rubber cushion holds the device to the table top. This leaves both hands free for developing. The 11⅝″ x 18¼″ size is large enough to accommodate plates for most offset duplicators. The plateholder eliminates the danger of creasing and bending plates while developing the image. Price is $8.90. **For More Information Circle No. 143.**

STENO PRACTICE RECORDS

Keane Records, 1439 N. Western Ave., Los Angeles 27, Calif., offers Steno-Disc dictation long-playing (33-1/3) records which feature actual business letters for secretaries and stenographers. These dictation records are an easy way to maintain and increase shorthand speed. Four different records are available, with material from actual business letters, delivered by a well-modulated, easy-to-understand male voice. Each general business record has 36 minutes of dictation in the following speeds: Record 501, 60, 70, 80, 90 wpm.; Record 502, 70, 80, 90, 100 wpm.; Record 503, 80, 90, 100, 110 wmp.; Record 504, one side general business, 90, 100 wpm. and one side legal dictation, 110, 120 wpm. Each record is $3.98. **For More Information Circle No. 129.**

New Miller-Trojan "SHARPSHOOTER" handles all 3

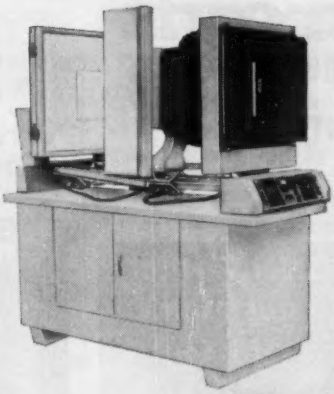
Ektalith, Xerox, Gevacopy backs interchange easily and quickly. All backs mount in same focal plane; use same focusing scales for each.

Length only 63½". Built low for easy loading of copy. No complicated controls; anyone can operate after brief instruction.

Wollensak wide field lens permits 3x enlargement, 3x reduction. Copy board size 22" x 25".

Transformer-operated incandescent exposing lights permit operation at three different intensities. Economical, yet provide high intensity light necessary for transfer processes.

16-hour training classes in process camera operation are conducted at the Miller-Trojan plant. Openings are presently available for your personnel.



Ektalith METHOD

HALOID XEROX

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For More Information Circle No. 258

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destroyit
office paper shredder

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GLIDER All Steel Vertical

BLUE PRINT FILES

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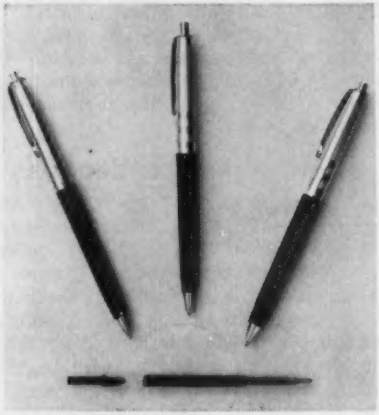
4176 Montrose Ave. Chicago 41, Illinois

For More Information Circle No. 276

BALLPEN

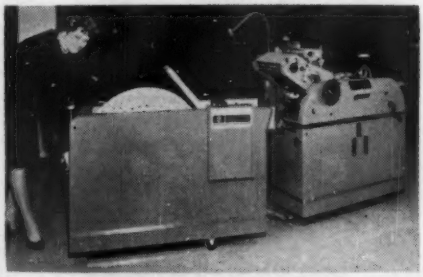
Gardner Stamp Co., 166 S. Washington St., Wilkes-Barre, Pa., announces Prest-O-Rite retractable pen which will write through warm, sticky grease with no skipping. Available in medium (.039) point,



blue ink only, designed for smooth writing and longer life. Contains special Jumbo refill with Grippit ball and Formulabs quality pre-tested ink. Metal Protect-O-Point prevents ink smudging. Smooth top-action mechanism and military clip. 98c each, $9.41 per doz., postpaid with money-back guarantee. Single sample Prest-O-Rite pen sent for 75c. **For More Information Circle No. 161.**

OFFSET DUPLICATOR SORTER

Addressograph-Multigraph Corp., Cleveland 17, Ohio, announces the automatic



Copy Sorter Model 670 which performs the collating operation as a by-product of

THIS IS THE UNDERWOOD FORUM

This new electric typewriter with both carbon ribbon and fabric ribbon offers a unique combination of advanced features, outstanding beauty and sturdy dependability. In the exceptional beauty and readability of its typescript the Forum offers businessmen a way to make every typewritten message more important, more impressive and more complimentary to the recipient. When used for high-level correspondence the Forum's carbon ribbon provides impressive color-contrast, while for routine typing assignments the fabric ribbon may be preferred. (For cutting stencils, of course, the Forum may be adjusted to use neither ribbon.) Such features as the title-centering scale and reverse tabulation help to make the Forum one of management's most efficient office tools. For a demonstration, telephone your local Underwood representative. Underwood Corporation, One Park Ave., N.Y. 16, N.Y.

For More Information Circle No. 425

Don't break your back digging up buried information!

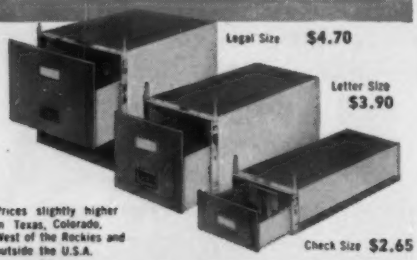
LOCATE YOUR RECORDS EASILY—No more fussing and fuming. With Pronto files your records are as active as your regular files.

BEAUTIFUL APPEARANCE—Finish in attractive olive green to match your regular office files.

STURDY CONSTRUCTION—Built of 275 lb. tested corrugated fibre board . . . reinforced with steel on the shell and the four corners of the drawers as well.

SAVE FLOOR SPACE—Prontos are constructed to interlock into solid units and stack as high as the ceiling.

PRONTO STORAGE FILES



Prices slightly higher in Texas, Colorado, West of the Rockies and outside the U.S.A.

PRONTO FILE CORPORATION
415 MADISON AVENUE, NEW YORK 17, N.Y.
For More Information Circle No. 249

offset duplicating. This addition to the Multigraph product line can be attached to any Multilith Model 1250, 1275 or 2550 duplicator. Its operation is synchronized with that of the duplicator and the need for manual collating is eliminated. As a result production is greatly increased; cost reduced. The Model 670 Sorter's rotary drum has 50 compartments. Each will hold up to 100 sheets of 20 lb. paper from 3″ x 5″ to 11″ x 14″. Thus 50 sets of 200 pages each can be duplicated front and back and automatically gathered in a single machine run. **For More Information Circle No. 135.**

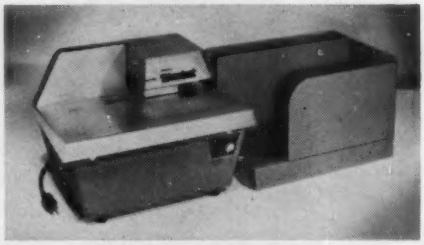
PUNCH & FILE FASTENER SET

Charles Leonard, Inc., 79-11 Cooper Ave., Glendale 27, N. Y., offers a desk-model punch and ten sets of 2″ capacity prong file fasteners in one compact pack-

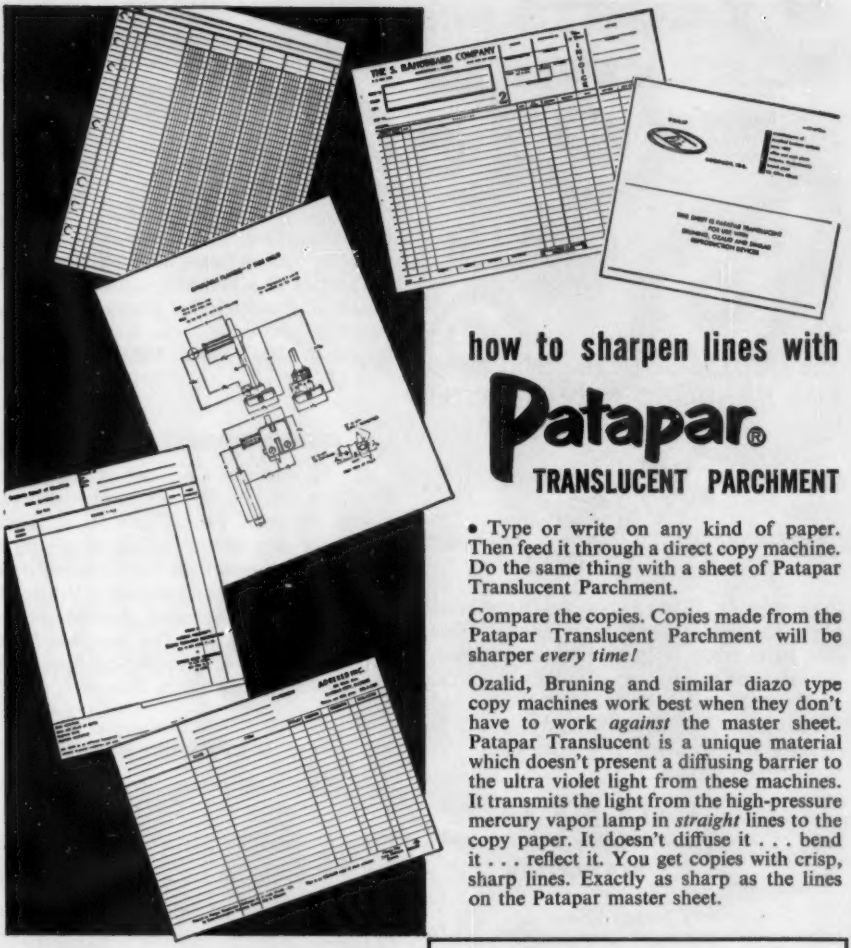
age. The punch, in sea foam green, has three punching positions utilizing standard 2¾″ centers. Ten complete sets of Prestong R-20 fasteners complete the package. **For More Information Circle No. 164.**

ENVELOPE OPENER

Redman Co., 6028 N. Cicero Ave., Chicago 46, Ill., introduces the low-priced,



fully automatic electric Wombat Letter Opener for offices which open moderate volumes of mail. It is said to meet the



how to sharpen lines with Patapar® TRANSLUCENT PARCHMENT

• Type or write on any kind of paper. Then feed it through a direct copy machine. Do the same thing with a sheet of Patapar Translucent Parchment.

Compare the copies. Copies made from the Patapar Translucent Parchment will be sharper *every time!*

Ozalid, Bruning and similar diazo type copy machines work best when they don't have to work *against* the master sheet. Patapar Translucent is a unique material which doesn't present a diffusing barrier to the ultra violet light from these machines. It transmits the light from the high-pressure mercury vapor lamp in *straight* lines to the copy paper. It doesn't diffuse it . . . bend it . . . reflect it. You get copies with crisp, sharp lines. Exactly as sharp as the lines on the Patapar master sheet.

Printed Patapar Translucent office forms will add even more readability, speed, convenience and ease to your daily communications. The carefully prepared surface of this Translucent Parchment is ideally suited for the sharp and precise printing necessary in form make-up. This same quality eliminates feathering, regardless of the type of pencils, pens or typewriters used to fill in the forms. If you use Ozalid or Bruning (diazo type) copy machines, please request samples of PATAPAR on your company letterhead.

PATERSON PARCHMENT PAPER COMPANY
BRISTOL, PENNSYLVANIA

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For More Information Circle No. 272

requirements of speed and utility required by even large mail order firms. The Wombat automatically feeds and opens all sizes of envelopes at the rate of 300 to 400 a minute. A patented cutting head opens the lightest weight airmail envelope without tearing, cutting or mutilating contents. Unit occupies only 9″ x 12″, and is streamline-designed to enhance office decor. Enclosed cutting heads for safe, quiet, operation. Gearless motor needs a minimum of maintenance. All parts are U.L. approved. The Wombat sells for $129.95 and is unconditionally guaranteed for one year against defects in workmanship or materials. **For More Information Circle No. 152.**

CHAIN PRINTER RIBBON

H. M. Storms Co., 561 Grand Ave., Brooklyn 38, N. Y., announces a nylon ribbon for IBM 1403 Chain Printers with extremely dry inking which prevents the release of ink under the high tension which machine puts on the ribbon. While this eliminates the frequent, annoying need for clean-ups, there is no sacrifice in the ribbon's ink life or printing qualities. **For More Information Circle No. 187.**

PAPER CLIP

Gladen Enterprises, Inc., Bay City, Mich., announces the plastic Zip-Clip,

paper clip, which can be printed with any message desired: Urgent, Rush, Return for Filing, etc. Zip-Clips also may be written

Big Paperwork Savings are oftentimes a lot of LITTLE SAVINGS!

When you use Bruning Copyflex copying machines, savings add up fast. The low cost of Copyflex copies—only 1¢ each for materials for letter size—can multiply material savings to thousands of dollars annually over other processes. The wide range of Copyflex applications can pile up tremendous savings in clerical work, coming from every department in your company. With Copyflex you reproduce from one original form all the documents and copies necessary to complete a business operation—order-invoice, purchasing-receiving, production control, accounting, etc. No rewriting or retyping of information, ever. You speed operations by days, vastly improve inter-company communications. And to add to these savings of time, work and money, Bruning gives you the final economy of a single source for everything you need in copying machines, materials and services.

BRUNING *Copyflex*®

Charles Bruning Company, Inc., Dept. 3-H
1800 Central Road, Mt. Prospect, Illinois
Offices in principal U.S. cities
In Canada: 103 Church St., Toronto 1, Ont.

Please send me information on Copyflex for business systems and general copying.

Name_____ Title_____

Company_____

Address_____

City_____ Co._____ State_____

For More Information Circle No. 206

This is the new Royaltyper,[T.M.] a 100% better way to do automatic mass typing jobs than old two-unit systems.

You claim so much. Be specific. What's new and better about it? This: it's single-system. It does its punching *and* its typing all with one simple standard keyboard. See the keyboard in the picture down there? That's it. The Royaltyper tape is an exclusive, too. Its card width is designed for ease of handling and storage economy. Another standard feature: automatic tape reproduction, to permit easy revisions and updating.

Is this Royaltyper any easier to operate than other punchers? About 100% easier. Any typist can do it without special training.

Tell how. She rolls in a piece of paper, flicks a switch, types the first letter, just as she'd type any letter. This automatically punches the tape, and the operator sees every word she punches.

You mean there's no blind punching? No blind punching as in outmoded 2-unit systems. Then the machine takes over—at 135 words per minute all day long. Number of copies: unlimited. If you ever have personalized first copy mass mailings to get out, and you're tired of paying the price of independent punching service or operator training...

Where can I get literature? I'm going to tell you: get in touch with Royal McBee Corporation, Port Chester, New York.

Oh, yes. One more thing. I bet it costs like... No. It is firmly in line with other systems.

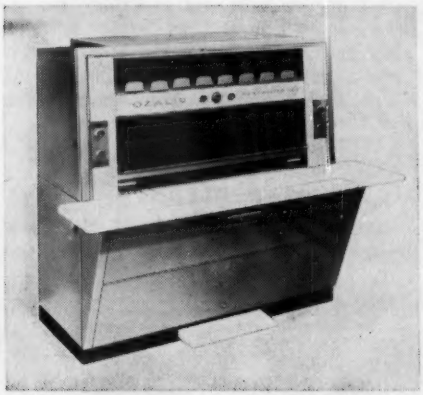
A Product of Royal McBee Corporation, World's Largest Manufacturer of Typewriters.

For More Information Circle No. 227

upon, erased and reused. Clips may be used in filing, interoffice correspondence, flagging important papers, etc. Another imprint may be a company's trademark, slogan, name and address, or other advertising. Zip-Clips are made of strong, flexible plastic, said to have extra long life for indefinite re-use. Non-staining and non-rusting, they may be used on important correspondence, documents, textiles and other critical materials. Supplied plain in choice of colors or white, or imprinted with two or three lines of copy as directed. For free samples and prices, **Circle No. 170.**

WHITEPRINTER

Ozalid Div., General Aniline & Film Corp., 69 Corliss Lane, Johnson City, N. Y., has designed the Printmaster 900 as a deluxe whiteprinter for engineering and architectural drawings, visual aids materials, and a wide variety of forms.



The 900 accommodates materials of any length and up to 42" wide. Printing and developing speeds are synchronized up to 75 ft. per minute. The sleeveless dry diazo developing system assures scratch-proof protection of sensitized films, and eliminates the need for slipsheets. Double-coated materials get full, fast developing in one pass. Vapors are sealed at the developer unit's entrance and exit by Teflon-covered drive rollers. Entire developer unit slides out from the back of the ma-

They all write with

All-Rite

One of All-Rite's pens for every purpose ...

COSMOPOLITAN

6½" long, pocket/desk model: Eight ink colors: Blue, red, green, black, turquoise, gold, brown, lavender.

#1460: Utility Pen — Medium line — 39¢ ea.
#F1460: Auditors Pen — Extra fine line — 49¢ ea.

ALL-RITE PEN, INC.
HACKENSACK, NEW JERSEY

For More Information Circle No. 244

Now!
FAST LOW COST ADDRESSING
Envelopes, Circulars, Postcards, Etc.
Faster than 7 Typists
NEW
Model 99
Master Addresser

ONLY
$99.50
plus
federal exc.
tax

"Automatic Drive"
moves envelopes into printing position automatically.
Prints from paper address slips prepared on your typewriter — or written with a ball point pen.
Low initial cost—simple to install — low operating cost.
Address card has ample area for keeping records. Use it for record information as well as address information, if you wish.

Master

FULLY WARRANTED
For more information and dealer name write
MASTER ADDRESSER COMPANY
West Lake Street Minneapolis 26, Minn.

For More Information Circle No. 280

INK CANS ARE OLD FASHION
MODERN PRINTERS USE
VAN SON INK GUNS

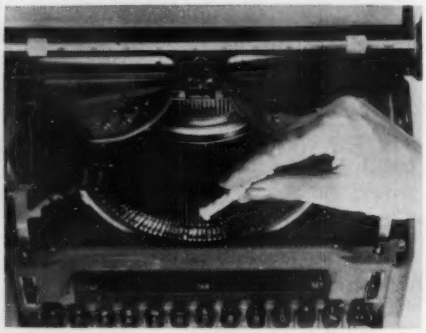
AND
CARTRIDGES
VAN SON HOLLAND INK
UNION AND LIBERTY STREET, MINEOLA, NEW YORK

For More Information Circle No. 281

chine for simplified servicing. An instant start, variable speed system offers maximum operating reliability with silicon rectifiers replacing electron tubes. Feeding originals and print paper is easy due to good visibility. A double-action foot pedal slows or reverses machine so operator can retrieve incorrectly fed materials and masters from printing section without loss of time or material. Positive, automatic safety device insures against injuries and machine damage. Controls are easy to see, reach and use, holding operator fatigue to a minimum. Variable speed control, lamp intensity switch that varies light output from 4500 to 7500 watts, and high-low developer control are centered at eye level just above feedboard. Cooling system permits processing plastic-coated materials and foil without sticking in the printing section. Filtered air system keeps blowers, lamps, cylinders and prints clean, reducing machine downtime for cleaning. Minimum dimensions of 72¼″ wide, 70½″ high and 29″ deep are increased to 84¼″ in width with feedboard, and to 76½″ in depth with feedboard and rear stacking tray. The Printmaster 900 is wired for 220-volt AC 60 cycles single phase. **For More Information Circle No. 136.**

TYPECLEANER

Perry-Sherwood Corp., 257 Park Ave. S., New York 10, N. Y., offers an easy, fast,



clean way to remove dirt from typewriter type. Called Britetype, this product is said to make type as sharp and bright as new,

Diehl

Automatic
Calculating Machine

Diehl

CALCULATING MACHINES, INC.

527 MADISON AVENUE, NEW YORK 22, N. Y.

Telephone: ELdorado 5-6066

For More Information Circle No. 375

NO SHELVING NEEDED!
STAXONSTEEL employs an engineering principle to combine the strength of steel with the economy of corrugated board. The steel supporting frame gives the drawer equal support front, back and sides. For long term economy there is no better record storage drawer than STAXONSTEEL. Five standard stock sizes available.

Send for FREE "Manual of Record Storage Practice" telling you how long to retain or destroy business records PLUS our complete catalog of Special Record Storage Filing Equipment.

BANKERS BOX PRODUCTS

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Record Storage Specialists Since 1918
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Please send, without obligation, my FREE manual of Record Storage Practice PLUS new, complete product catalog.

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(Please Print Plainly)

Company_____
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Address_____

Postoffice_____ State_____

For More Information Circle No. 260

with no filled in e's and o's, in seconds. Each Britetype stick has a wick at one end. Squeezing the stick saturates the wick with a special dirt-dissolving formula that wipes away dirt in seconds. Britetype is clean and time-saving, and is said to save maintenance and repair bills since the special formula is applied only to the typeface itself. Box of ten sticks sells for 98c. For a free testing sample, **Circle No. 145.**

MAIL BAG WITH LOCK

Can-Pro Corp., 30 E. McWilliams St., Fond du Lac, Wis., states that Can-Pro Security mail bags are now equipped with a smoothly operating, built-in lock for

extra protection. It is key-operated, tumbler style, made by Yale-Towne. The lock is securely riveted to a heavy leather patch so it can't be lost. Twin carrying handles are rugged plastic. The 14″ x 18″ heavy canvas bag with genuine leather trim and one-piece, molded rubber bottom, has been added to Can-Pro's complete line of mail bags in canvas and leather or all-leather, in stand-up or folding styles. For folder of all mailroom items, **Circle No. 130.**

TYPEWRITER RIBBON

Manifold Supplies Co., 188 Third Ave., Brooklyn 17, N. Y., has added Pana-mile typewriter ribbons to its Panama-Beaver line of ribbons and carbon papers. Pana-mile is said to offer more than a mile of

EFFICIENCY

with ROL·DEX *you get* EFFICIENCY!

because:

- **records ROLL to the seated clerk**
- **all records are immediately accessible**
- **better control; easier supervision**
- **random reference is no problem**
- **no waiting for hidden, motor-driven trays**
- **fewer personnel can handle large volumes of records**

find out about all the other advantages of Rol-Dex equipment. It's built to fit your system, your form size, your volume, your space, your expansion plans.

For More Information
Circle No. 199

Rol-Dex Division

ROL·DEX

pat. and pats. pending

WATSON MANUFACTURING COMPANY, Inc.
Jamestown, New York

WATSON MANUFACTURING COMPANY, INC.
Rol-Dex Division, Dept. 0-5, Jamestown, New York

Please send literature on Rol-Dex record handling equipment.

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Firm .....

Street .....

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"Coverteers"

Shown on Model E-15R Harter Chair

DRESS UP YOUR OFFICE CHAIRS

In smartly styled, durable, slip-on covers that provide seating comfort and improve office decor.

Easy-to-apply Coverteers in a variety of quality fabrics recommended by leading manufacturers—will fit more than 100 models of secretarial and executive office chairs.

Write for literature today.

Covercraft Company, Inc.
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For More Information Circle No. 251

SORT-O-FILE
Reg. U.S. Pat. Off.
SAVES 20% TO 60% TIME
30 Models. Systems Sorting Service
THOUSANDS IN USE
For fast hand-sorting of cards, checks, letters, invoices, orders, business forms or public documents. For collating on the new **Col-A-Tron.** Write for illustrated circulars.
Since 1946
Representatives everywhere.
Associated Industrial Designers
P.O. Box 39652, Los Angeles 39, California
Plant: 1250 East Sixth Street
Warehouse: New York, Chicago

For More Information Circle No. 252

cleaner, sharper, more colorful typing. The ribbon is 36 yds. long and costs less per yard. It produces sharp carbon copies and Unimasters. A specially treated leader allows easier ribbon changing. **For More Information Circle No. 182.**

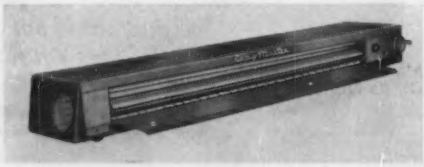
WATER PURIFIER

Western Ogden Purifier Corp., 7906 Santa Monica Blvd., Hollywood 46, Calif., offers the Ogden Water Purifier which uses a replaceable filter pack, chemically treated with bacterial additives, for con-

stant purification. Each pack is capable of purifying from 100 to 500 or more gallons, depending on condition of the water. Filter requires changing when rate of flow lessens, due to the turbidity and amount of organic matter removed, and can be quickly and easily replaced by anyone without the use of tools. **For More Information Circle No. 171.**

WHITEPRINTER

Copymation, Inc., 5650 N. Western Ave., Chicago 45, Ill., announces the



Copymaster, a compact table or wall mounted 44" whiteprinter with variable printing speed range up to 10 ft. per min-

New Heyer Conqueror Paper Folder...

lets you do two things at once!

Don't confuse this with any folding machine you've ever seen, because this one is different . . . it runs itself! At the touch of a lever, the *new* Heyer Conqueror Paper Folder *automatically* feeds, folds, counts and stacks 110 sheets a minute and stops when the last sheet is fed.

You can leave this fine production machine unattended while it automatically folds printed pieces as they come from your duplicator or offset press!

Now you can fold letters, invoices, statements, *even multiples of 6 or 8 sheets stapled together*, quickly, effortlessly. A hand-operated model is available for shorter, occasional runs.

No question about it . . . this machine will quickly pay for itself!

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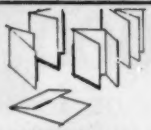
Send for Information
About one week
FREE trial



Makes all standard folds . . .
invoices, statements, advertising literature, even stapled sheets.

Turn a dial . . .
for non-skip feeding of thin, medium, coarse, glossy or heavy papers, 3 x 5" to 9 x 17" in size.

Adjustable feed wheels . . .
grasp paper at outer edges—do not smudge printed area.

Two quick-set fold controls . . .
at top of machine, adjacent to permanent instructions and fold diagrams.

Counts as it folds . . .
highly visible re-set counter shows accurately how many sheets have been folded.

Belt delivery to a perfect stack . . .
conveyor belt deposits folded sheets in neat stack in adjustable receiver. **Turns off automatically when last sheet is fed.**

See us at Booth 3-R, Office Equipment Manufacturers Exhibit, April 17-21, New York Coliseum

For More Information Circle No. 201

NATIONAL ACCOUNTING MACHINES are fast, flexible and accurate.

EDWARD P. HUNERBERG, SECRETARY & OFFICE MANAGER of Supreme Steel Equipment Co.

THIS NATIONAL SYSTEM paid for itself in one year.

"Our *National* Accounting System saves us $14,000 a year... returns 108% annually on investment!"

—Supreme Steel Equipment Corp., *Brooklyn, N. Y.*

"Before installing our National Accounting System, all billing and accounting was done by hand. The savings in time and money resulting from the use of our National System are astounding.

"Legible and easily understood figures are aways available. Sales representatives get important selling statistics when they are most needed. Time alone saved over our previous method amounts to $700 a month. Our flexible National System provides us with pre-invoicing, customer history card, sales analysis by customer and product, cash receipts and commission statements.

"These are only a few of the features and savings of our National System, which returns 108% annually on our investment, a saving of $14,000 a year!"

Edward P. Hunerberg

Secretary and Office Manager

Your business, too, can benefit from the many time- and money-saving features of a National System. Nationals pay for themselves quickly through savings, then continue to return you a regular yearly profit. National's world-wide service organization will protect this profit. Ask us about the National Maintenance Plan. (See the yellow pages of your phone book.)

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ACCOUNTING MACHINES
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ELECTRONIC DATA PROCESSING
NCR PAPER (NO CARBON REQUIRED)

THE NATIONAL CASH REGISTER COMPANY, *Dayton 9, Ohio*

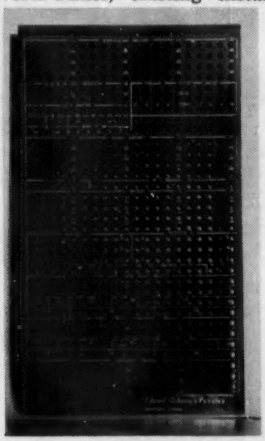
1039 OFFICES IN 121 COUNTRIES
77 YEARS OF HELPING BUSINESS SAVE MONEY

For More Information Circle No. 210

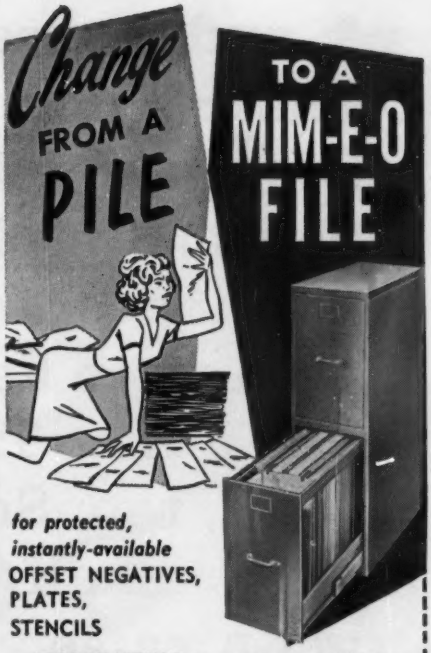
ute controlled by a single knob with full reverse. The machine produces sharp prints quickly from any translucent material, makes intermediates and sepias. Price is under $300. The unit is housed in 18-gauge steel finished in baked-on office colors. Dimensions are 6¼" x 9¼" x 58½" and overall weight is 80 lbs. Three easily replaceable black light fluorescent lamps provide light source. Unit plugs into a standard electric outlet. Developing chamber, of aluminum, is 4" x 4" x 55¼", weighs 4 lbs. **For More Information Circle No. 155.**

CONVERSION WIRING PANEL

Edward Ochman Systems, Box 141, Fairfield, Conn., announces the Converta-Panel which allows data processing installations to convert from existing jack-type panels to self-contacting panels. With the Converta-Panel, existing installations



can use their own frames and simply insert the Converta-Panel Phenolics. Since all but two types of panels are self-contacting, converting all existing panels to self-contacting types eliminates the necessity, expense and inconvenience of stocking four kinds of wires. Requirements are reduced in half by requiring only two kinds of wires to be stocked. Also, panels are lighter, easier and faster to wire. Eliminated is the need and expense of replacing broken prongs in jack type Panels. It is less painful to insert and remove

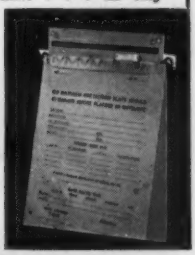


for protected, instantly-available OFFSET NEGATIVES, PLATES, STENCILS

STOP WASTING time and money! Every time you lose or damage an original, you're throwing away a $10.00 average investment. With low cost, sturdy MIM-E-O STENCIL FILES, you can *immediately* put your finger on a *perfect* stencil, neg or plate hanging free from pressure . . . protected . . . easily filed, easily found.

There's a MIM-E-O model for all types and sizes, to protect from 150 to 1400 "investments".

And new *SADDLE ENVELOPES* hang *negatives, plate plus all work sheets* in a single, handy, compact filing unit . . . in any MIM-E-O model.



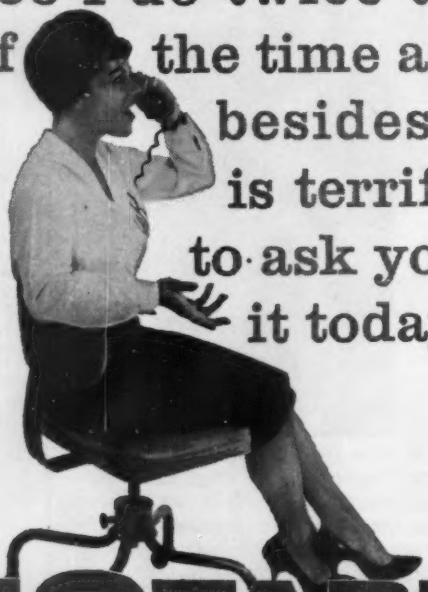
SAVE SPACE AND TIME with EASY-FILE CLIPS and EASY-FIND INDEXES

MIM-E-O STENCIL FILES CO.
1051 N. Paulina Street • Chicago 22, Ill.

500 Distributors . . . coast to coast, to help you solve your stencil or offset filing problem.

For More Information Circle No. 279

"...and I'm practically a lady of leisure, now that marvelous StenOtape does most of my work. Simply uncanny, the way it hears the boss's words, even when he's pacing around like a lion. Transcribes like a whiz, too. So I do twice the work in half the time and get a raise besides !!! StenOtape is terrific, you ought to ask your boss to try it today."



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STENOTAPE

DICTATING - TRANSCRIBING - CONFERENCE MACHINE

FREE TRIAL AT YOUR DESK

STENOTAPE

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For More Information Circle No. 282

wires; and 30% lower in cost. Converta-Panels are available for 077, 089, 513, 514, 523, 552, 402 and 403 machines. **For More Information Circle No. 466.**

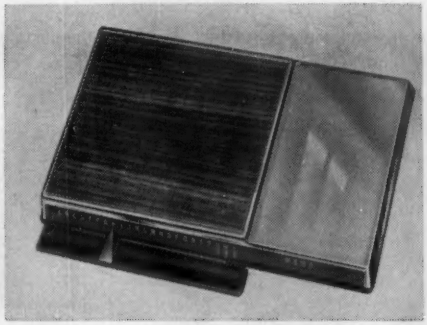
WET MOP

Pettett Mfg. Co., P.O. Drawer 431, Miami, Okla., makes the Metalcase mop with a metal clamp that permanently holds the Oklahoma six-ply yarn and screws onto

the mop handle. Mops can be changed in eight seconds without handling the mop. The yarn is clamped to form cushioned shoulders which act as buffers to eliminate scratching furniture and baseboards. The design provides 1½" greater spread than an ordinary mop head, to cover greater areas in less time. **For More Information Circle No. 465.**

TELEPHONE INDEX

Bates Mfg. Co., Orange, N. J., has added the designer-styled Imperial Mark I



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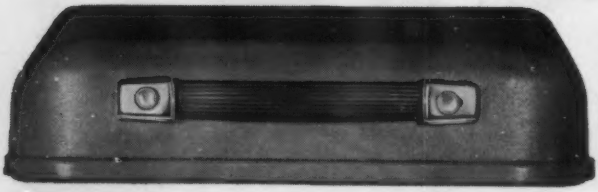
Professional writers choose Cole above all other portables, because only Cole has all the important features they demand in a typewriter . . . Mist Green, Desert Sand or Cole Gray, Complete with catching carrying case . . . only **$94.50** plus tax.

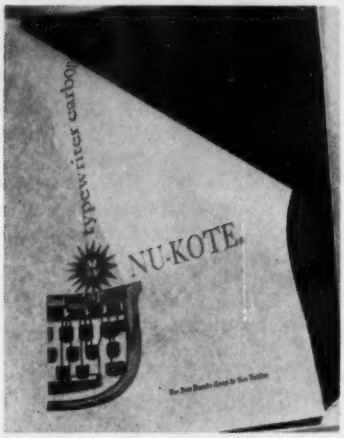


COLE STEEL OFFICE MACHINES, INC. • Affiliate of Cole Steel Equipment Co., Inc. • 415 Madison Avenue • New York 17, N.
For More Information Circle No. 248

to their broad line of telephone indexes and list finders. The Imperial Mark I features index cards in easily read green (with space for direct distance code), color-matching memo pad and gold-finished mechanical pencil. The Imperial Mark I's cover blends natural wood and contrasting metal finishes. The four models available are: natural walnut with brushed brass finish, natural walnut with brushed aluminum finish, Claro mahogany with polished brass finish and a gray driftwood with brushed aluminum finish. Packed in a gray jeweler's flannel bag and then in an attractive gray and red, two-piece gift box, the Imperial Mark I is 8½" long, 6" wide, 1½" high; weighs 2¼ lbs. Retail price is $9.95. **For More Information Circle No. 134.**

CARBON PAPER PACKAGING

Paterson Parchment Paper Co., Bristol, Pa., announces that Encore typewriter carbon paper and Nu-Kote pencil carbon paper, both products of Burroughs Corp., are packaged for protection during ship-



ment and while in storage by folders made of Patapar Vegetable Parchment, selected because of its stain and smudge resisting characteristics. As a result of its neutral pH factor and chemical inertness, Patapar does not disturb the sensitive qualities of the carbon papers. Patapar is easy to handle in packaging operations since it

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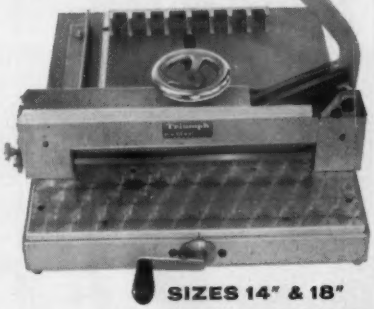
all metal
Triumph
the precision Paper Cutter



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yet as inexpensive as a disposable pen

3015—Koh-I-Ball "Double-Ender", one end writes red, the other writes blue. 49¢.

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A BALLPOINT FOR EVERY HOME AND OFFICE USE!

3009TC—Koh-I-Ball Glideomatic. Long Visi-Point with TUNGSTEN CARBIDE ball. Color of barrel indicates color of ink: blue-black, red, green, black, and reproducing. 39¢.

3018—Koh-I-Ball. Long Visi-Point. Color of barrel indicates color of ink: blue-black, red, green, black. Also pocket model (3018D). 29¢.

3025F—Koh-I-Ball Reproducing. For marking and writing intended for reproduction. Available also in fine point (3024F) and pocket model with clip and protector. 29¢.

3012D—Koh-I-Ball Retractable. Non-skip writing. Plastic barrel with pocket clip. 29¢.

Write For Quantity Prices

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INCORPORATED
Bloomsbury 10, New Jersey

For More Information Circle No. 242

does not have the slippery effect of some packaging materials. Patapar Vegetable Parchment is non-toxic, odorless and tasteless. Long used for food packaging because of its resistance to penetration by oil and grease, it has a smooth, fiber-free surface and will not adhere to sticky or tacky products. **For More Information Circle No. 162.**

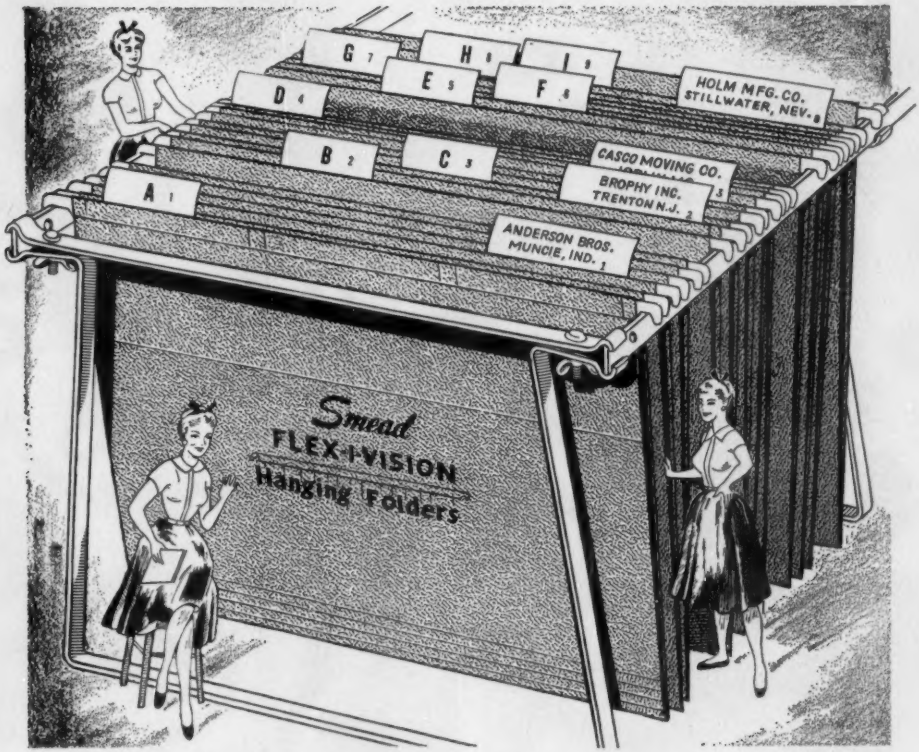
CARBON RIBBON & PAPER

Aetna Products Co., Box 438, Hicksville, N. Y., announces Del-e-tape eradicable carbon paper ribbon and Del-e-tape carbon paper with blur-proof, smudge-free properties. When Del-e-tape eradi-

cable typewriter ribbon is used with Del-e-tape Deleter, letters and other materials may be corrected instantly. Available in 5/16" width by 4" diameter, it fits most carbon ribbon machines, costs $12 a doz. **For More Information Circle No. 172.**

PHOTOCOPY PAPER

Copy-Craft, Inc., 105 Chambers St., New York 7, N. Y., announces addition of Agfa Multicopy paper to its line of photocopy papers. This paper allows making five photo-exact copies for as low as 4c each. Finest quality reproductions can be made from any type of original, one- or two-sided, regardless of color or print, including pen, pencil or crayon notations, spirit duplications, carbons, blueprints and



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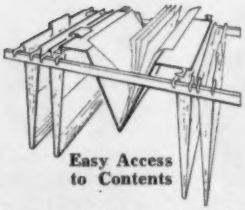

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For *instant accessibility* you just can't beat a desk drawer of hanging folders. Papers and records are at your finger tips at all times—you don't even have to get out of your chair to find them.

We suggest you investigate Smead Flex-I-Vision Hanging Folders. The tab is all metal (for long life)—it has a full inch of index exposure (more than any other tab)—its snap-on principle is the quickest and easiest of any tab.

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Ask your Smead *office supply dealer* to show you a set of Flex-I-Vision Folders and Tabs—or fill in the coupon ⟶ and we'll send you literature which will show and tell you all about "the tab that tops them all."

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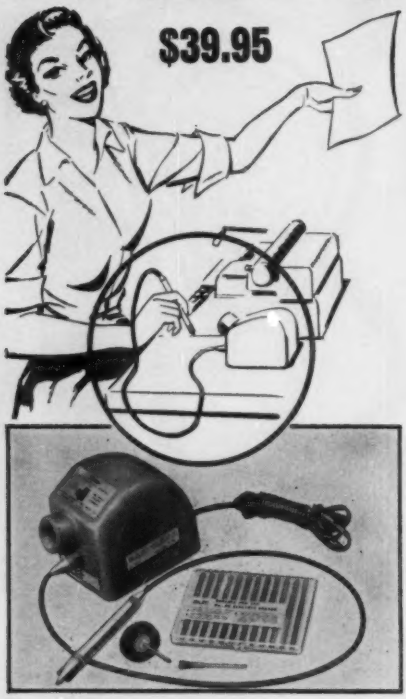

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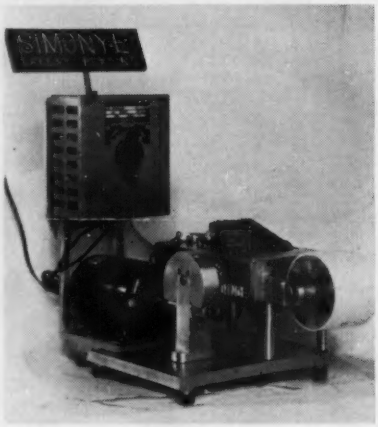
copies, picking up minutest detail. Copies are permanent; acceptable as legal evidence. Uniform quality from one size to another and from shipment to shipment eliminates guesswork and paper waste for savings to the user. Available in all sizes. **For More Information Circle No. 131.**

RIBBON TESTING MACHINE

F. Simonye, Mt. Airy and Harbourton Road, Lambertville, N. J., announces an improved electric ribbon testing machine with a counter. Machine's speed can be controlled from 25 to 100 impressions



per minute. It also has an adjustment for varying impressions from light to heavy, and operations can be stopped within a fraction of a second. It can be mounted on any table or desk, or on a bench for use directly in the manufacturing process. By removing feed roller guard, the same machine can be used to test carbon paper. Designed to test, compare and prove the quality of ribbons and carbons. **For More Information Circle No. 190.**

BINDERS

Cooks, Inc., Blackwood, N. J., offers a complete line of Ful-Vu Twin Wire and Mult-O-Ring Binders in Vinylhide, a

EASY FAST INEXPENSIVE

PLATEMAKING

MODEL RP-17
$298
17" x 23"

Rapid Printer
PLATEMAKERS

Ideal for small offset plates and duplicating masters. Vacuum frame is on top, powerful carbon arc lamp in the base. Makes perfect plates every time as only a carbon arc lamp can, and clean, simple operation makes it the perfect machine for office and in-plant reproduction departments.

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Send for Bulletin A230O.

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For More Information Circle No. 204

One machine to label postcards and magazines?

Yes . . . and at cost-cutting high speeds up to 16,000 per hour! The Cheshire Model E adjusts easily to handle small postcards and envelopes . . . middle-sized pamphlets and brochures . . . or even larger magazines, catalogs and quarterfold tabloids. Applies all types of labels, too (wide-strip, narrow-strip, continuous pack form, cut or individual labels) . . . whether they're pre-addressed from your punched cards, plates, stencils or other addressing systems. Compact . . . and easy to operate.

The Cheshire Model E.

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Write for descriptive brochure.

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For More Information Circle No. 205

tough but attractive cover. Its soft, smooth finish is especially suitable for gold stamping or printing. Twin Wire and Mult-O-Ring Binders in Vinylhide are said to offer extreme durability and resistance to scuffing, marking, soiling and to be unaf-

fected by moisture. Durable nylon stitching assures longer wear and better appearance for displaying sales literature, product information, photographs, etc. Binders are available in a variety of sizes. **For More Information Circle No. 467.**

TYPEWRITER RIBBON

Carter's Ink Co., Cambridge 42, Mass., announces Super Length Nylon typewriter

ribbon that gives longer mileage and needs fewer changes. The extra-fine ribbon is

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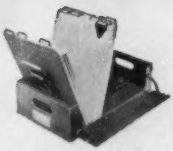
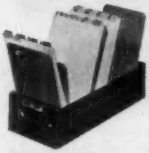
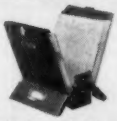
POSTING EQUIPMENT
FOR MODERN
OFFICE PROCEDURES

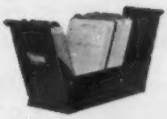
DUO-MATIC POSTING TRAYS AND STANDS

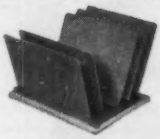

PORTA-MATIC POSTING TRAYS AND STANDS


TILT-O-MATIC TRAYS
(For register forms)

V-MATIC TRAYS
(Small capacity containers)


HANDI-MATIC TRAYS
(For writing board and machine accounting—records requiring small capacity containers)


EXPANDI-MATIC
(Designed for installations where space is at a premium)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For More Information Circle No. 246

6 ft. longer than former standard length ribbons. This helps the ribbon wear unusually well, providing greater recuperation time between type-blows. Besides demanding fewer changes, Super Length Nylon comes with Carter's Silver Tip to make each change cleaner and faster. The ribbon also gives extra-sharp or "printed look" typing impressions, the result of a precision blend of ink and weave. Available in black and black-and-red inkings for all standard machines. **For More Information Circle No. 167.**

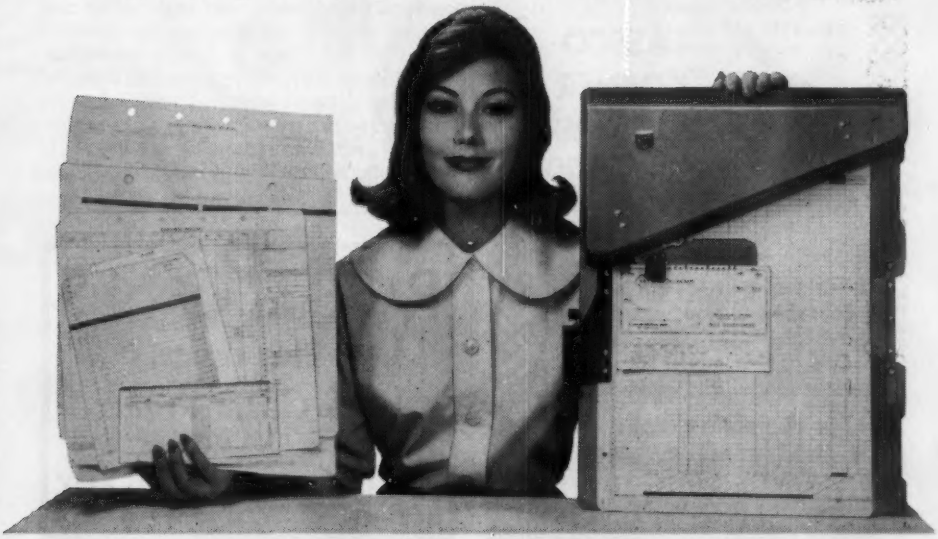
PORTABLE RECORDS SAFE

Schwab Safe Co., Lafayette, Ind., announces the Model 2224 Visible Record Safe which holds two visible slide record cabinets for 5″ x 8″ cards and safely protects records from fire and theft. The records safe's portability provides access

and protection at point of use. The lower two-thirds of safe door pulls down to provide a work area, while the upper one-third of the door is raised. A handle actuates three-line locking bolts for fire and burglar protection when door is closed. Inside dimensions are 22¼″ wide, 24¼″ high, 28½″ deep; outside dimensions, 26¼″ wide, 28¾″ high, 32½″ deep. Single cabinet safe with mechanism and protection also is available. **For More Information Circle No. 175.**

Accounting News from Royal McBee

From Royal McBee, leaders in the field of data processing, comes an accounting tool especially designed for the small and medium-sized business—as well as for decentralized offices of larger corporations. This is THE ROYAL McBEE GENERAL RECORDS POSTER. Most versatile, because it brings the benefits of mechanization to all your accounting—payables, receivables, payroll, general ledger—without specialized personnel. Most efficient, because it eliminates repetitive writing, slashes paper-handling costs by as much as 60%. Most flexible, because it's completely adaptable to current methods, varying work loads. Most economical, because its low cost is well within your company's means. Forms are immediately available from stock—or can be custom-made to your requirements. Your nearby Royal McBee Data Processing Systems Representative has had a wealth of experience in solving accounting problems. Call him, or write Royal McBee Corporation, Data Processing Division, Port Chester, N. Y. for your complimentary copy of our illustrated brochure Number S-533.



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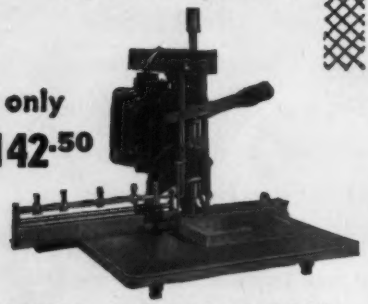
"My Spinnit Paper Drill Paid for Itself in 4 months,"

says small printer.



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LASSCO CORNER ROUNDER Model 20

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—including one cutting unit. Four shear-action "plug-in" units available: ⅛", ¼", ⅜", ½". Cuts ½" of stock. Heavy-duty Floor Model also available.

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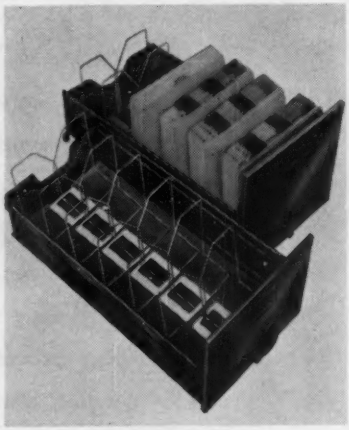
485 Hague St. • Rochester 6, N. Y.

For More Information Circle No. 300

FILE DRAWER DIVIDERS

Cel-U-Dex Corp., New Windsor, Newburgh, N. Y., announces improvements in its Div-I-Dex file drawer dividers. Heavier metal is being used, design has been re-engineered, and construction is sturdier with a chrome-plated finish now being standard. Div-I-Dex dividers are said to make a four-drawer filing cabinet do the



work of five drawers, and make filing and finding speedier by keeping file drawers neat with the contents readily accessible. A set of six Div-I-Dex units for letter or legal size drawers with rod retails for $6; set for rodless-type drawers with anchor strip, $7; set for jumbo size drawers, $10. **For More Information Circle No. 174.**

RIBBONS
for the
1403 Chain Printer
PRICES ON REQUEST
H. M. STORMS COMPANY
561 GRAND AVENUE, BROOKLYN 38, N. Y.

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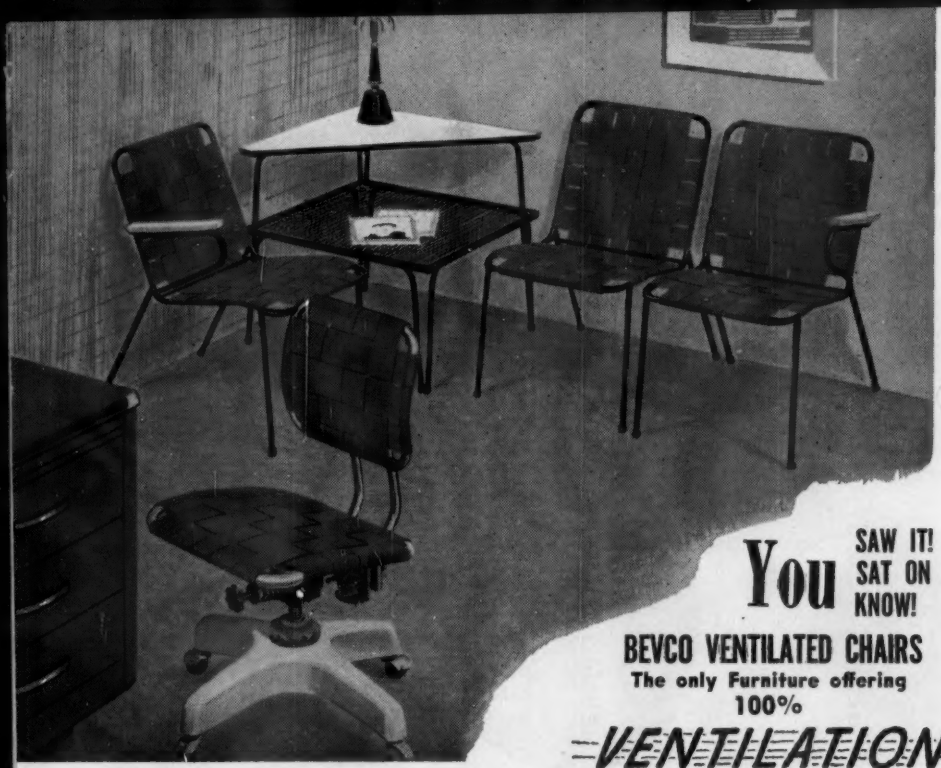

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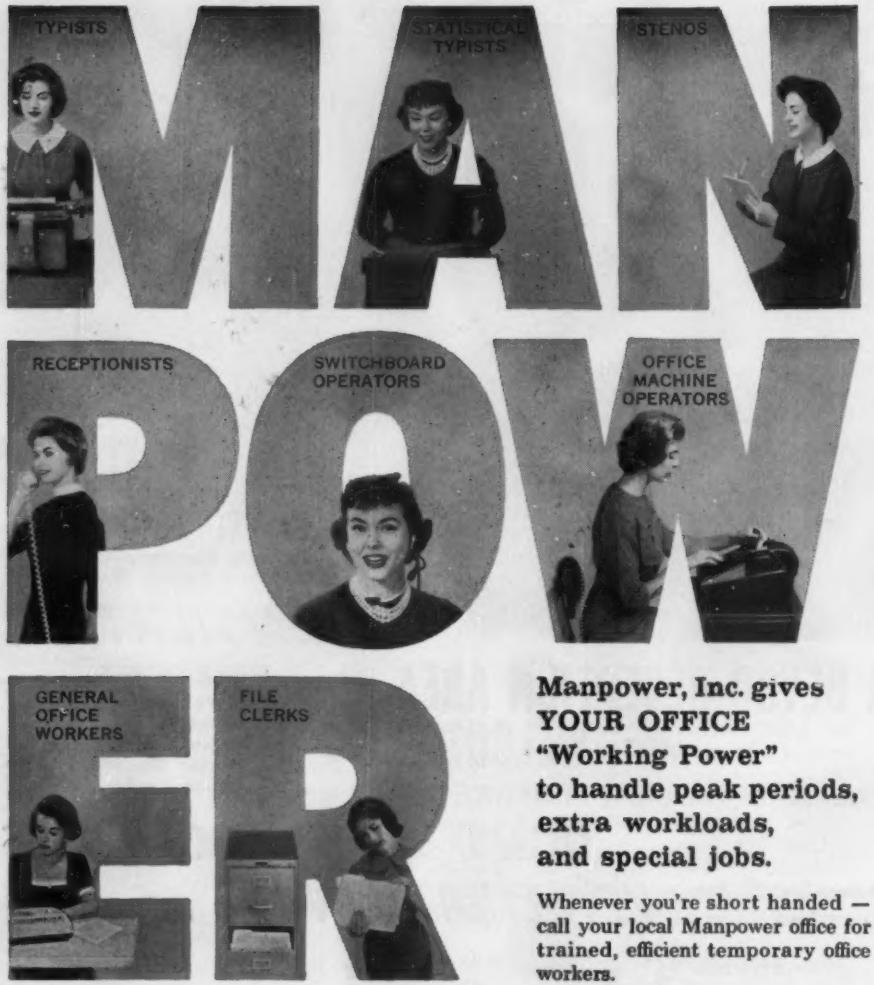
BEVCO PRECISION MANUFACTURING COMPANY
831 Chicago Avenue, Evanston, Illinois



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For More Information Circle No. 379

Literature from the Manufacturers

TAX-RETURN COPY GUIDE

Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn., offers a "Guide for Reproducing Federal Tax Returns" in any Thermo-Fax copying machine. The booklet includes a reference table which indicates correct size, type and color of Thermo-Fax copy paper to be used for making copies of individual tax forms. Included is a list of important rules and hints to follow when preparing dry copy tax returns for filing. States which authorize reproductions of tax returns also are named. For this guide, **Circle No. 165.**

COMPUTER PROGRAMING

Bendix Computer Div., 5630 Arbor Vitae St., Los Angeles 45, Calif., offers an eight-page brochure describing several of the most important automatic programing systems for the Bendix G-15 digital computer. The booklet describes the general characteristics of automatic programing systems for both commercial and scientific computer applications, and includes partially coded illustrations of typical problems. For "Bendix G-15 Automatic Programming Systems," Bulletin AR-1060, **Circle No. 115.**

PHOTOCOPY EQUIPMENT

Triangle Business Machines, Inc., 1808 S. Main St., Los Angeles 15, Calif., offers a brochure describing the recently introduced Triangle photocopy equipment line. Illustrated are two new lines of photocopy equipment, the Triangle series for general office use, and the Universal series with contact printer for heavier industrial use. Both models reproduce all colors in black on white. Also illustrated is an accessory for use with copying machines limited in ability to reproduce color. This device, used in conjunction with such machines, will reproduce all colors in black on white and, in addition, develop metal offset plates. For brochure, **Circle No. 117.**

PARTITIONS

National Gypsum Co., Buffalo 2, N. Y., offers a colorful technical bulletin, "Space Control With Gold Bond Partition Panels", which provides architectural and engineer-

ing data on several types of panels and systems. The publication includes photos, drawings, data and specifications on Asbestone Panels (asbestos-cement faced, insulated sandwich panels), Durasan Panels (gypsum-core panels with textured vinyl surfacing for hollow partition systems) and Durasan Twin Panels (gypsum-core panels vinyl-faced on both sides for solid paneling). Full-color photos illustrate possible uses, and details are given on several recommended framing systems. For A.I.A. File No. 35-H-6, **Circle No. 119.**

PAPER CUTTER

Challenge Machinery Co., Grand Haven, Mich., offers an informative, four-page descriptive folder in two colors which describes the operating features and speci-

• FAST • ECONOMICAL
• EFFICIENT • SAFE

FOR

NEGATIVES • OFFSET PLATES
STENCILS • SKETCHES • ARTWORK
MASTERS • X-RAYS

ATLAS
VERTICAL FILING SYSTEMS

The Atlas DeLuxe Model

NOW

Available in Four Widths

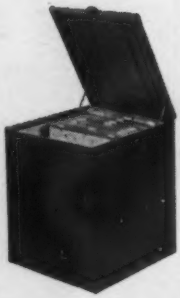
A DeLuxe—Files 600 items to 10½" wide x 22"

B DeLuxe—Files 600 items to 13" wide x 22"

E DeLuxe—Files 600 items to 17" wide x 22"

C DeLuxe—Files 600 items to 21" wide x 22" (C DeLuxe Illustrated)

All DeLuxe Models are equipped with casters.



Atlas manufactures a complete line of 11½", 14", 18" and 22" hangers for the DeLuxe Models and for larger and smaller cabinets which are also available. Hangers are manufactured in styles and sizes for all types of plates, negatives, stencils, artwork, swatches, etc. Illustrated is one of the four sizes of the Atlas Nega-Plate hanger.

Write for complete literature

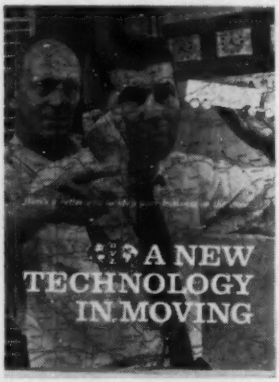
ATLAS STENCIL FILES CORP.
16716 Westfield Avenue, Cleveland 10, Ohio

For More Information Circle No. 298

fications of Challenge Champion 30½" paper cutter, which is said to offer faster, easier cutting for printing plants and in-plant duplicator operations. For this publication No. 650, **Circle No. 118.**

MOVING GUIDE

Global Van Lines, Box 3313, Terminal Annex, Los Angeles 54, Calif., offers a free booklet which demonstrates advanced



methods developed to economically move executives, exhibits or valuable equipment worldwide, via a "modern moving service for fussy people." Entitled "A New Technology in Moving," it is offered to readers without cost. For a copy, **Circle No. 157.**

LETTERPRESS PAPERS

New York & Pennsylvania Co., 425 Park Ave., New York 22, N. Y., offers a swatch book with samples of two new

NEW ON THE MARKET

Elite
ADDING
MACHINE

• Full Keyboard
• Direct Subtraction
• Repeat Key

$49.50*

Fully Guaranteed

AMERICAN OFFICE EQUIPMENT COMPANY
24 East 21st Street, New York 10, New York
Dealer Inquiries Invited *Plus F.E.T.

For More Information Circle No. 299

AUTOMATION

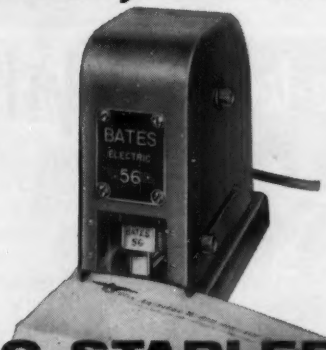
BATES C-H30 Electric Stapler

This fabulous machine staples at a touch of the paper! Jam-free and easy to reload, the Model C Head makes its own staples from a continuous roll of rust-proof brass wire—5,000 at one loading. Interchangeable H-30 Head for heavy duty jobs (up to 100 sheets at a time). Rugged construction assures long, trouble-free service.

IN STAPLING, TOO!

BATES "56" Electric Stapler

Completely automatic, staples at a touch of the paper. Uses a BATES "56" standard stapler, easily removable and replaceable, loading 210 standard staples. Adjustable depth gauge makes it easy to place staple the desired distance from edge of paper. Other features include compact design, push-button loading and "Safety-matic" construction.



BATES ELECTRIC STAPLERS

Standard for Excellence

For complete information, write

the **BATES** manufacturing co.

Orange, New Jersey

New York Office: 63 Vesey Street, New York 7, N. Y.

NUMBERING MACHINES • STAPLERS • LIST FINDERS • PUNCHES • STAMP PADS • EYELETERS

For More Information Circle No. 431

letterpress papers: English Finish for books, and Eggshell for both books and direct mail pieces. The swatch book contains five samples of the Penn/Print papers in 40, 45, 60 and 70 basic weights. The English Finish samples show close formation and uniform finish on both felt and wire sides for faithful reproduction of text type and difficult halftones. Eggshell samples show soft quality texture with good opacity and bulking characteristics. Printed on English Finish, the swatch book's introductory page illustrates the reproduction quality of this new paper with two colors and a halftone. For swatch book, **Circle No. 110.**

DATA PROCESSING RIBBONS

Phillips Ribbon & Carbon Div., Labelon Corp., 10 Chapin St., Canandaigua, N. Y., offers a brochure, "The Phillips Program for Data Processing Ribbons" with general information about the Phillips line and a complete price list on data processing ribbons for all equipment regardless of manufacture. The brochure concerns only data processing ribbons and is not a general catalog of the complete line of carbons and ribbons. For a copy, **Circle No. 156.**

OFFICE CAMERA

M. P. Goodkin Co., 112 Arlington St., Newark 2, N. J., announces literature describing the new Goodkin SS Custom Camera, designed to handle approximately 80% of the photographic needs of office reproduction centers, commercial printers and lettershops. It will produce regular line and halftone negatives, Ektalith and Gevacopy projection-type transfer material, Gevacopy contact paper negatives and regular photocopies in a 1-to-1 ratio up to 8½" x 13" legal size. For a copy, **Circle No. 177.**

ILLUMINATED MAGNIFIERS

E. W. Pike & Co., 577 Pennsylvania Ave., Elizabeth, N. J., manufacturer of illuminated magnifiers and microscopes, describes its full line in an illustrated

"Go-togethers" for Positive Property Control!

"AUTOGRAPHS" . . . AND YOUR F. F. & E.

Positive Property Control begins with properly tagged physical assets. Identify efficiently "out-front" with Serially Numbered "AUTOGRAPHS".

Benefits? Reduced capital expenditures, curtailed losses and thefts, verifiable tax computations and equitable insurance coverage.

Made from lustrous .016" aluminum (*not a foil*). Legibly debossed serial numbers. Adhesive backing. *A cinch to mount on any surface.*

Millions used on the FF & E of businesses, industries, institutions and governments. *Many reasons why!*

Write for samples, prices and a 16-page booklet on Property Control.

METALcraft INC.
1619 SO. FEDERAL AVE. MASON CITY, IOWA

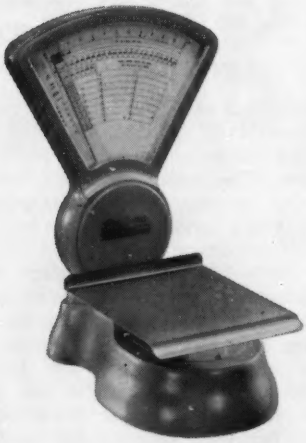
For More Information Circle No. 283

Is your mail scale an old meany?

Old conventional scales get tough or tired, erratic. They may overweigh, waste postage for you. (Even eight letters a day, with an extra unneeded 4¢ stamp, can lose nearly $100 in a year.) Or they underweigh – and your letters arrive "Postage Due." Which does not make the recipients feel kindly to your firm!

You avoid embarrassment or waste of postage with a Pitney-Bowes mailing scale – precision made to U. S. Bureau of Standards specifications, and used in U. S. postoffices. Its automatic pendulum mechanism gives it built-in accuracy, for years to come. Large markings are easy to see. The hairline indicator registers instantly, exactly. Mailing is faster and easier.

There are seven PB scale models – including two for parcel post. Ask any Pitney-Bowes office for a demonstration. Or send for free illustrated booklet.



FREE: *Handy desk or wall chart of latest postal rates, with parcel post map and zone finder.*

Pitney-Bowes

MAILING SCALES

Made by the originator of the postage meter . . . 148 offices in U. S. and Canada

PITNEY-BOWES, INC.
3488 Walnut Street
Stamford, Conn.

Send free booklet ☐ *rate chart* ☐

Name _____

Address _____

For More Information Circle No. 339

NEW Paper Welder

Fastens Paper Using Nothing But the Paper Itself!

- No Refills
- No Clogged Machines
- No Staples to Remove
- No Bulky Files
- Paper Easily Unlocked, No Tearing
- Welded Papers Lay Flat

It Costs Nothing To Press The Handle

A precision made instrument with handsome chrome finish. It is new, novel, smooth, silent, and efficient in operation. Never needs refilling. It will weld up to six sheets of 16# paper. Modernize your office with this time and money saving office appliance. An ideal gift with name engraved on the handle. If your dealer cannot supply you, write direct. Dealer inquiries invited.

PAPER WELDER, INC. Medina, N. Y.

For More Information Circle No. 373

and only Sure-Rite has it!

Look for the stencil with the patented Red Dot Seal Tab!

Write for full information and free sample.

American Stencil Manufacturing Co.
2714 WALNUT STREET • DENVER 5, COLORADO

For More Information Circle No. 374

brochure. Special models and accessories are also presented in this complete, yet concise, piece. For your copy, **Circle No. 114.**

DATA CONVERTERS

Digitronics Corp., Albertson Ave., Albertson, L.I., N.Y., has released a brochure describing its line of converters. Featured is a problem solved for a leading stock brokerage firm. The solution is in the form of a Digitronics converter which, in the words of the broker, will pay for itself in less than two years, based on the economies achieved. Problem, solution, and results are presented in complete detail. Description includes need for equipment to convert from magnetic tape directly to five-hole tape, for Teletype transmission, how Digitronics designed and produced a converter to fit the broker's operations, and the savings in time, space, personnel and rentals. For this brochure, **Circle No. 189.**

LETTERING SET

Keuffel & Esser Co., 3rd & Adams Sts., Hoboken, N. J., describes the 8935 Doric Lettering Set in a two-color bulletin now available. The folder illustrates how letters and numbers can be reproduced vertically and slanted, in capitals and lower case, in pencil or in ink, and in three sizes, .100, .140 and .240". Each of the set's seven components—adjustable scriber, template, transparent straightedge, two lettering pens for two-line widths, lead holder and ink cartridge—are described and illustrated. The bulletin has photographs showing how the low-priced set is used. Prices are included. For the folder, **Circle No. 192.**

ELECTRIC STAPLER

Staplex Co., 781 Fifth Ave., Brooklyn 32, N. Y., has published a two-color flyer on SE-77F electric stapler which explains how machine is operated by a solenoid mechanism designed specifically for electric stapling. Smooth and reliable in operation, the stapling position of SE-77F is always

(Adv.)

orange crate or gold-plated deluxe . . .

What Should You Buy in a Filing Cabinet?

TIME was when you could define file quality quite clearly as Grades A, B, C, or D. But no longer do these designations mean much. Manufacturers now are producing models which cut across these former guide posts.

There are still legitimate "Grade A" files today, as there were in former years. But unqualified claims to this label by various manufacturers have in recent years tended to confuse the picture for the buyer.

Today, there are many substantial improvements in all classes of files, whatever the grade label. More performance, more function have been built into economical versions of the so-called "Grade A" files to make them more practical for general office use.

And even in the "low-end" group of accepted commercial grade files are some features not too different from those of the high-priced makes. These files also have their place – but their place should be defined.

To approach intelligently the file market, a buyer must have clearly in mind the use for which the file is intended.

Will a file drawer be opened on the average of once or twice a day, or 20 times a day? What about drawer loading and capacity? Are quietness and ease of operation important factors? The answers to these and other questions will define your specific requirements.

Accordingly, the informed buyer can buy for his specific needs. It is wasteful to spend extra dollars for a high-priced file where the need does not justify it, just as it is foolhardy to expect too much from a "cheap" unit. Filing requirements should be analyzed regularly, and standards changed as needed, to make sure that you are buying properly.

* * *

The H-O-N Co., with its range of files in HONOR and H-O-N Lines, can effectively fill the specifications for most of your filing needs. Nylon rollers are used throughout to assure the ultimate in quiet and easy drawer operation. Long, trouble-free life is guaranteed.

We shall be glad to help you in analyzing your requirements and in setting up proper specifications to ensure the most effective use of your allotted funds for filing equipment.

H·O·N
OFFICE EQUIPMENT

MUSCATINE, IOWA

For More Information Circle No. 330

COPYMAKER®

. . . the New Economical White Paper

for use on Thermo-Fax Machines

You've never seen anything like it! You get clearer, heavy-weight copies—black or brown—less curl, less crease. Superior contrast, non-glare and non-transparent. Will accept more handling—will endure prolonged exposure to heat and has better file life . . . all this and it costs less. For free demonstration write

Old Town

OLD TOWN CORPORATION

750 Pacific Street **Brooklyn 38, N. Y.**

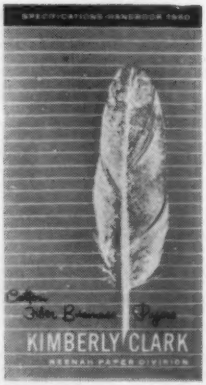
AVAILABLE THROUGH BETTER STATIONERS EVERYWHERE

For More Information Circle No. 303

visible to operator for exact placement of staples. Machine's adjustable backgauge is quickly set to any depth up to 4½". Machine can handle up to 32 sheets of 20-lb. bond or mimo paper without adjustment for different thicknesses. The SE-77F replaces hand stapling. Every tap on foot or knee switch drives a staple automatically, with no waste effort or hand motion. Operator has both hands free to handle work. For literature, **Circle No. 111.**

BUSINESS PAPERS

Kimberly-Clark Corp., Neenah, Wis., makes available a specifications handbook for cotton fiber business papers. The handbook gives specifications for each grade of Neenah paper including colors, weights,



finishes, packaging and availability of matching envelopes. A section on product information includes advice on special watermarking, specialty and technical papers, and other information of interest to the paper buyer and seller. For this handbook, **Circle No. 462.**

COLLATOR

Thomas Collators, Inc., 100 Church St., New York 7, N. Y., announces literature describing its redesigned 20 and 32-sheet tandem collators. Used for gathering duplicated sheets into sets, equipment improvements provide smoother, quieter more efficient collating, greater durability

HOW CAN **YOU** USE

codex GRAPH PAPERS

IN **YOUR** BUSINESS?

- COMPARE SALES
- CONTROL PROFIT
- MEASURE PROGRESS

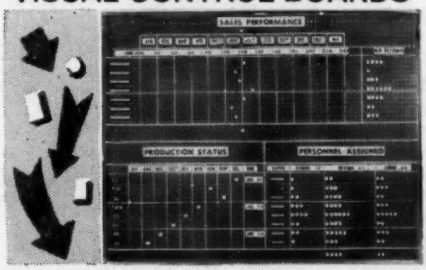
ORDER DIRECT SAMPLES ON REQUEST

Nearly 1000 Different Cross-Section, Business and Engineering Sheets in Stock For Same Day Shipment.

CODEX BOOK CO., NORWOOD 18, MASS.

magnetic

VISUAL CONTROL BOARDS



Make Card and Peg Systems Obsolete

No fuss . . . no mess with cards, pegs, or other signal devices with "Maggie" Control Systems. Permanent colored magnetic indicators that move with finger-tip ease offer the easiest, quickest way to chart sales, production, inventories, traffic, etc. The first cost is the last cost because there are no cards or pegs to replace.

Packaged kits—board and magnetic indicators—begin at $49.50.
For further information, write to:

maggie magnetic visual aids corp.
11 West 42nd Street • New York 36, N. Y.

For More Information Circle No. 351

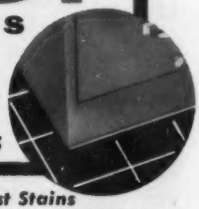
STOP FLOOR RUST STAINS

with Rebco

FLOOR-GARD

ANTI-RUST

File Cabinet Strips



- ***Prevents Rust Stains***
- ***Reduces Depressions***
- ***Resists Skidding***

Prevent rust stains on your floors caused by rearranging of office cabinets. Easily installed Rebco **Floor-Gard** plastic strips provide low-cost protection. Rust stains are eliminated and depressions in flooring are materially reduced.

Purchase through leading office supply and building maintenance distributors or write:

Ralph E. Baker Co., Inc.

302 Allwood Road, Clifton, New Jersey

For More Information Circle No. 352

UNDA·WUNDA TYPEWRITER PAD by enor

- Anchors Typewriter Firmly
- Reduces Noise
- Lessens Fatigue
- Increases Speed and Accuracy

Standard & Electric sizes—eggshell, tan, green, gray colors

*Unda Wunda is a trademark of the Enor Corp.

ENOR CORP. 55 Woodbine Street Bergenfield, New Jersey

For More Information Circle No. 353

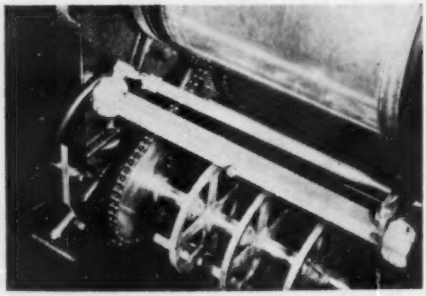
and more attractive design. Complete flexibility in a range of sheet sizes from 4" x 5" to 17" x 22", and through a broad range of weights and finishes, is also provided. For a copy, **Circle No. 178.**

WORLD GLOBES

Replogle Globes, Inc., 1901 N. Narragansett Ave., Chicago 39, Ill., offers a 12-page catalog showing their complete line of illuminated and non-illuminated globes ranging from 6" to 32" in diameter ($2 to $1000). Included is the Dura-Globe of lightweight, rigid, transparent plastic which is virtually indestructible. Dura-Globes are available in desk and pull-down models. Stereo Relief globes are shown in a wider selection of models in desk and pull-down models from $9.95 to $16.95. The catalog introduces an illuminated counterpart of Replogle's 32" Diplomat globe. Known for its detail and reference value, illumination now makes the 22,000 place names more legible. For the catalog, **Circle No. 179.**

STATIC ELIMINATION

Simco Co., 920 Walnut St., Lansdale, Pa., offers a brochure, "Static Can Be Fun," which describes several methods of eliminating static in offset duplicators. Literature explains the nature of static



(which can slow down production and reduce the quality of reproduction) and how to locate it. Static is often the cause of printing troubles for which other causes are sought. It is unpredictable and manifests itself in various ways. This literature

THE FAMOUS ROBERTS 50 (Since 1889)

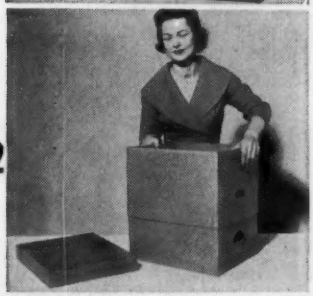
HELLER ROBERTS
Manufacturing Corporation

The Roberts 50 triple-action numbering machine is designed to give years of trouble-free service. Flick the 3-way switch and instantly you shift to consecutive, duplicate or repeat automatic numbering as desired. Beautifully engineered, all-steel construction, precision-machined parts, with choice of 5 to 9 wheels in several figure styles and sizes. You'll like the smooth solid action, the crisp clean impressions, the provision for retracting wheels not in use. One of a complete line of Roberts numbering machines world famous since 1889. Write Roberts Numbering Machine Division, Heller Roberts Mfg. Corp., 700 Jamaica Ave., Brooklyn 8, N. Y.

For More Information Circle No. 302

1

2



3

SETS UP AUTOMATICALLY

"1—2—3"

FOR IMMEDIATE USE

The UNIQUE

PAIGE MIRACLE BOX

cuts record retention costs 75% in equipment—300% in space!

The unique Paige Miracle Box has created a new system for efficient and economical record retention, utilizing full floor-to-ceiling space.

UNIQUE—because it sets up INSTANTLY and AUTOMATICALLY—no taping or stapling required.

UNIQUE—because it is the only corrugated container that is completely **double**-walled and **double**-cornered, providing amazing strength and durability.

UNIQUE—because it is **double**-floored, providing a bottom that can't "fall through."

UNIQUE—because it has a separate, telescopic cover.

UNIQUE—because it is rugged, though light in weight. Easy to lift and move by its comfortable hand-holds; even when full, can easily be carried by a girl.

Our brochure explains how the use of the unique PAIGE MIRACLE BOX has developed a new system of retaining records . . . how leading companies get maximum use of available space, highest efficiency in operations, greatest convenience for personnel. We'll be glad to send you a copy.

The PAIGE Company
95 MADISON AVE.
NEW YORK 16, N. Y.

THE PAIGE CO., 95 MADISON AVE., NEW YORK 16, N. Y.
Send your new, illustrated Miracle Box brochure.
NAME ..... TITLE 0-3-61
COMPANY .....
STREET .....

For More Information Circle No. 237

should be both interesting and useful to users of offset and other types of duplicators and paper processing equipment. For a copy, **Circle No. 168.**

FIRE FIGHTING EQUIPMENT

Fyr-Fyter Co., 221 Crane St., Dayton 1, Ohio, announces the 1961 edition of "Interior Fire Fighting Equipment Catalog." Revised and published annually, it provides complete information on portable interior fire safety equipment for the protection of commercial and institutional properties. Catalog includes comprehensive engineering and specification data on the company's fire extinguishers, fire hose and extinguisher wall cabinets, hose racks, hose reels, angle valves, fire hose, fire hose nozzles, siamese connections and related fire control accessory equipment. For a copy, **Circle No. 113.**

LOAN COLLECTION SYSTEM

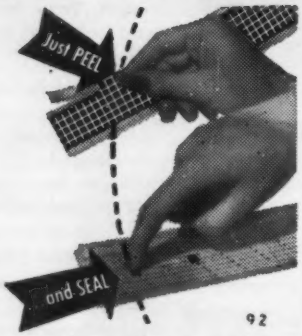
Royal McBee Corp., Westchester Ave., Post Chester, N.Y., offers Folder S-587 describing the General Records Poster's ability to create not only a customer receipt for each transaction, but ledger and journal entries from one writing. A journal is placed on the Poster. The girl receiving a payment slips the customer's ledger card under the journal and places a receipt on top. Entries made on the receipt are simultaneously re-recorded on ledger and journal. After several entries, girl touches a button which automatically positions receipt to collate additional entries to the other records. At completion of operation a knob moves journal up one line to receive next transaction. Average girl can master this procedure in a day's time. For folder, **Circle No. 193.**

CORRECT KEY-PUNCH ERRORS

with BRADY self-sticking

CORRECTION SEALS

Made of super-thin Mylar® . . . feeds freely, won't jam equipment. Highly visible opaque red color easy to spot. Fast to apply. Low in cost. Order red and transparent seals from stock; silver on special order. Send for free sample.



92

W. H. BRADY CO. • 770 W. GLENDALE AVE. • MILWAUKEE 9, WIS.

Manufacturers of Quality Pressure-Sensitive Tape Products • Est. 1914

SALES OFFICES: Atlanta • Boston • Buffalo • Chicago • Cincinnati • Cleveland Detroit • Hartford • Los Angeles • Milwaukee • New York • Newark • Philadelphia St. Louis • San Francisco • Brampton, Ontario, Canada

For More Information Circle No. 306

AT LAST! A miracle FABRIC typewriter ribbon that matches the sharpness of write of a carbon or plastic ribbon!

The Super Kemlon ribbon combines carbon ribbon sharpness with fabric durability. Never before has it been possible to achieve such clarity of write with a fabric ribbon. Super Kemlon ribbons are so thin that 36 yards are actually wound on an I.B.M. spool and 24 yards on all others. And yet because of its unique new chemical treatment, this miracle fabric will absorb more ink and will give more wear than any other ribbon ever made . . . cotton, nylon or silk.

FRANKEL
MANUFACTURING CO.

Established 1906

285 Rio Grande Boulevard • Denver 23, Colorado

In New York, contact:
Crystal Copy Corporation • 4 West 16th St. • New York, New York

SUPER KEMLON RIBBONS—WITH DUAL SPOOLS

36 yd. length for I.B.M. typewriters . . **$40.00 per doz.**
24 yd. length for all other typewriters **$28.50 per doz.**

SEND FOR YOUR TRIAL ORDER TODAY!

Dealer and Quantity Discount on Request.

FRANKEL MANUFACTURING CO.
285 Rio Grande Blvd., Denver 23, Colorado
Please send me a trial order of SUPER KEMLON typewriter ribbons. If I am not completely satisfied, I will return the unused portion of the order and receive credit.

☐ 36 yds. for I.B.M., $40 doz.
☐ 24 yds. for all other typewriters, $28.50 doz.

COLORS_____
DEGREE OF INKING: ☐ Medium ☐ Medium Heavy ☐ Record ☐ Offset
MAKE OF TYPEWRITER_____
Name_____
Firm Name_____
Address_____
City_____ Zone____ State____

For More Information Circle No. 433

SYNTRON

VIBRATORY
BUSINESS FORM
JOGGERS

—ease all
your paper
handling jobs

Syntron Business Form Joggers increase paper handling efficiency at every operation—preparing mail for opening, aligning invoices, punch cards, statements, cancelled checks, salesmen's reports, and other office materials. Eliminate slow manual jogging, speed office work by the use of simple vibration rheostat controlled for easy, instant adjustment.

Simplicity of design assures long, dependable service life with very low maintenance.

Syntron Business Form Joggers are fast, efficient, and effective—Tilting Rack model available with multiple bin racks two, three, or four dividers.

Write for detailed information today.

61PJ5

SYNTRON
SYNTRON
715 Lexington Avenue
Homer City, Pa.

For More Information Circle No. 369

(Continued from page 151)

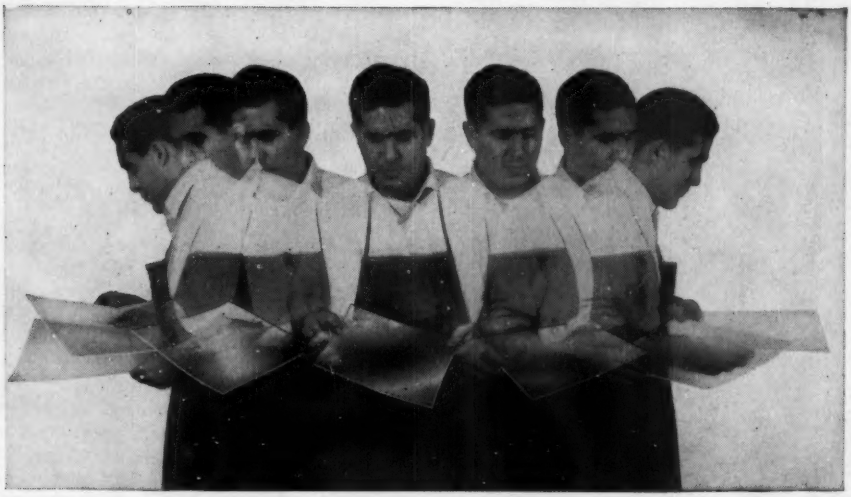
meet our needs, within a price range comparable to present punched card equipment costs. So far as conventional office equipment is concerned, this Department currently is installing inventory control systems for medical supplies, drugs and maintenance supplies, in 27 institutions caring for a total of over 100,000 patients. Vertical visible filing equipment is being employed. — GERALD GARTENBERG, *Director, Office of Planning & Procedures,* New York State Dept. of Mental Hygiene, Albany.

Salesmen Lack Ability

We are partially satisfied with our automated procedures and will continue expansion this year. It appears that if we research and explore long enough for the equipment and the type of media we can be satisfied with, it is available. Suppliers are short on service and representatives who have the technical ability to present their products, especially on new applications. Our purchases of regular and special office equipment will increase with more standardization to produce better service with a corresponding (we hope) reduction in costs.—W. E. ROHDE, *Chief Systems Analyst,* Ideal Cement Co., Denver.

Tab Machines Too Costly

This Cooperative is not large enough to use automatic data processing equipment. Our gross volume is around $6 million per year. At one time, we considered tabulating equipment but, in our case, the cost was prohibitive. We use a Burroughs Sensimatic bookkeeping machine for all posting of accounts receivable, accounts payable, payroll, sales analyses, patronage distributions, etc. Our other office machines such as calculators, etc., are becoming out-dated by present-day standards and we do anticipate the addition of several printing calculators. Our greatest need is a copying machine which will copy



Speedkote gets your offset jobs on press fast by cutting plate processing time two-thirds

Speedkote aluminum plates take only one-third the processing time to make them press ready. And Speedkote's wide exposure latitude gives you full flexibility, yet clean, sharp images every time.

You'll save on press time because Speedkote's chemically grained surface makes it easier to establish and hold ink-water balance on the press.

You'll get those short and medium run jobs on and off the press quicker and have more jobs finished at the end of the day.

Economical? You bet! *Both* sides of the Speedkote are presensitized, and with the low price, this means your plate costs are only *16½ cents* per side in duplicator sizes.

Find out more about how Speedkote can save you time and money. Mail the coupon today for more information and also receive a free plastic fountain dispenser bottle.

Manufacturers of Graphic Arts Supplies

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2 Ashburton Avenue,
Yonkers, New York

Please send me more information about Speedkote plates and my free fountain dispenser bottle. G3

We have.....size offset presses

Name.....

Firm.....

Address.....

City.....State.....

For More Information Circle No. 429

Tele-Rest

the ORIGINAL

telephone shoulder cradle

Retains leadership in its field.

Frees both hands while phoning

Adjustable for left or right shoulder use.

Made of durable Tenite plastic.

Fits ALL handset receivers in the U.S.A.

A natural rubber cushion provides no-slip comfort.

Available in black and colors.

At your stationers, or write

H. H. RENNEKER CO., INC.

P. O. Box 9235

San Diego 9, California

For More Information Circle No. 366

washable ink and not use a liquid developer. We are most certainly in the market for such a machine but I have received no information as yet that they are on the market.—J. D. MORGAN, *Office Manager,* Farmers Supply Cooperative, Greenwood, Miss.

Consolidated Functions

We have automated many of our procedures in the past and we are installing an IBM 7070/1401 tape oriented system. We have adopted the consolidated functions approach for the administration of our business. We will automate as many office procedures as feasible in the next few years. Future developments in optical character sensing and data communications are in line with our future plans.

There will always be a need for conventional office equipment. A reduction in the number of units necessary to operate our business is evident, but I believe this would be a fact regardless of EDP equipment. The development of this type of equipment will cause a reduction in the number of conventional units needed.—LLOYD E. GROSS, *Director, Statistical & Administrative Services,* Pan-American Life Insurance Co., New Orleans.

Tab Equipment Too Slow

During 1960 we tested tabulating equipment through the local service bureau, but did not progress beyond the testing stage. Our opinion, at the present time, is that our business moves too fast to use tabulating equipment in our traffic and accounting departments. In my opinion, I believe the manufacturers should be working along the lines of recording rapid changes in information and amounts. LEONARD BRIDGE, *Business Manager,* Wood Broadcasting, Inc., Grand Rapids, Mich.

Manufacturers Train Users

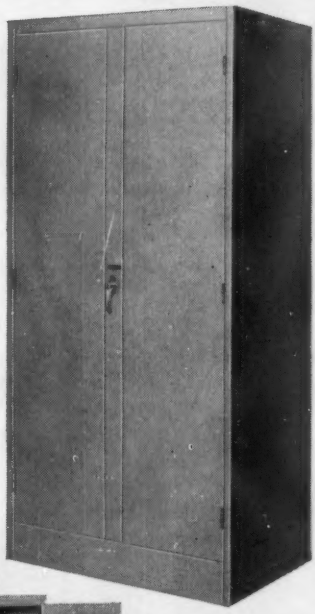
We are presently using a NCR 31-10-14 machine for our office and factory payrolls, and accounts payable. The entire payroll operation, from the calculation to

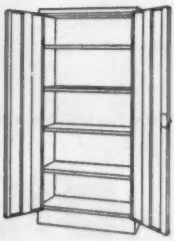
inexpensive in price

BORROUGHS
swinging-door cabinets

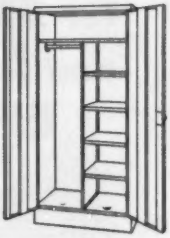
expensive in looks

TOP TO BOTTOM—front to back—inside and out—Borroughs' famous "Cyclops" Swinging-Door Cabinets are solid quality throughout in looks as well as performance. 42" and 78" heights—18" and 24" depths—36" width. Single central handle with Yale & Towne built-in lock. Doors swing completely open for full accessibility. Shelves adjustable without nuts or bolts. Before you buy any cabinets, learn all about the big Borroughs line!

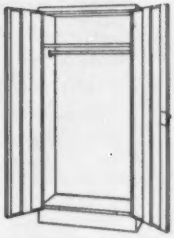




storage



combination



wardrobe

send for illustrated price list

BORROUGHS MANUFACTURING COMPANY

A SUBSIDIARY OF THE AMERICAN METAL PRODUCTS COMPANY OF DETROIT

3010 NORTH BURDICK ST. amp® KALAMAZOO, MICHIGAN

For More Information Circle No. 435

the completed check, is done on the machine, and we find it not only satisfactory, but time-saving. The accounts payable operation is satisfactory, but provides few advantages over our former typewritten method. Our chief objection to automated equipment is that trained operators are not readily available. We believe manufacturers could do a real service to present and prospective customers by maintaining a school where operators could be trained in the use of their equipment by their own personnel. We expect our future use and purchase of conventional office equipment to remain practically the same as in previous years.—L. K. FORNOF, *Secretary-Treasurer,* Seagrave Corp., Columbus, Ohio.

More Business in Same Space

We are designing a new system which will bring automation to both tellers' stations and accounting office by means of punched tape equipment at the tellers' windows which will serve as input to a computer in our accounting department. We feel this will give us the ability to expand our business 100% without additional space for personnel and machines.

For several years, we have not felt that manufacturers of data processing equipment were on the right track for the needs of savings and loan associations and banks because they were advocating the discontinuance of hard-copy ledger cards which could be selected at random by an employee and read without difficulty. Now they have recognized this problem and are correcting it. Both Burroughs Corp. and National Cash Register Co. now strongly advocate

DATERS

for SMALL and LARGE SPACES

FORCE Daters fit the space of all office forms. Model 400 is ideal for narrow spaces—inventory, ledger, sales cards etc. Date changes with stylus. Model 450 is all-purpose dater; month changes automatically after 31st day change. Bold day figures are easy to see.

Write for Catalog

WM. A. FORCE & CO., Incorporated
216 Nichols Ave.
Brooklyn 8, N. Y.

For More Information Circle No. 360

NEW Hano CHECK DESIGN SERVICE

FOR MULTICOPY CHECK AND VOUCHERS

Use Snap-a-Part or Continuous style checks complete with Magnetic Ink Characters

Multicopy, lithographed checks with magnetic ink characters are a Hano speciality. Backed by check designing and printing experience since 1888, Hano representatives can offer you a modern check design service, complete with magnetic ink characters now being required by many banks. Hano magnetic ink checks are pre-tested for guaranteed performance, and certified by machine manufacturers for acceptability. Hano multicopy check systems for payroll, dividends, accounts payable and other applications, are the first choice of careful buyers.

ARE YOUR CHECKS OUT OF DATE? GET THE FACTS NOW ON CHECK SYSTEMS BY

Hano

SINCE 1888

PHILIP HANO CO., INC., HOLYOKE, MASS.

Send complete information and sample check packet No. 139

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Company _____

Street _____

City _____ State _____

For More Information Circle No. 336

WORLD'S MOST MODERN DESK STAPLER!

THE ALL-NEW ARROW 210

DE LUXE Standard STAPLER

SAFE-FOOLPROOF-EASY-TO-OPERATE

This handsome, durably built, all-steel stapler brings you advanced features that make most other stapling machines old-fashioned —

- "Full Time" staple control
- Multiple stitch
- Wide base for balanced stapling
- Extra-large loading capacity

PLUS . . . other outstanding features

Comes in Office Decor Colors

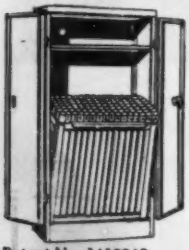
Beige, Green and Gray **$5.95**

— or All-Chrome **$6.95.**

At Your Favorite Stationer — or Write for FREE Literature.

ARROW FASTENER COMPANY, INC.
ONE JUNIUS STREET • BROOKLYN 12, N. Y.
"Pioneers and Pacesetters for Over a Quarter Century"

For More Information Circle No. 365



CONFIDENTIAL MAP FILE

MT4 — WITH LOCKING DOORS

STURDY METAL CABINET map file, has 112 tilting tubes. Easy to file and find maps, tracings, blue prints to 60".

Patent No. 1610368

MAIL ORDER TODAY

SCOTT-RICE CO. 610 S. Main, Tulsa 19, Okla.

For More Information Circle No. 364

the use of the ledger card. Our new system will involve ledger cards with human language on the front and machine language on the back by use of magnetic stripes. We still do not feel that manufacturers of punched card equipment should overlook the value of the ledger card. As for speed, accuracy and availability of statistical reports, manufacturers have done an excellent job.

We will continue to purchase and use conventional office equipment and integrate it with our new system. We have a strong belief that our business is best run in our own office by our own employees. We have not been sold on using service bureaus, which operate outside our office. We have purchased and are now setting up a complete Graphotype and Addressograph system, so our mailing lists can be kept within our office. To obtain maximum value from this equipment, we are designing our loan and savings department forms so they can be imprinted with a great deal of information from the Addressograph plates. You can see we are faced with updating and revising every department so that forms, procedures, reports and equipment will all combine to give us more economical and more efficient operation. Because of lack of available space to expand, we hope to do this with little expansion in personnel.—J. P. DUFF, *Executive Vice President,* Nebraska Savings & Loan Assn., Omaha.

Saves $80,000 a Year

Our company employs 5500 persons and approaches $150 million in sales annually, and has lately leaned on increased automation of office operations wherever economically justified. We have about three years experience with a fully integrated TWP system of sales order, invoicing, shipping and accounts receivable processing. We have added production-inventory, monthly journal entries and administrative messages to this network system connecting about 20 major plant and sales offices. We feel this system is now producing about $80,000 a year

net profit to our company.

We have utilized a service bureau approach over the past three years, using a medium scale IBM 650 card machine to process basic sales information and other accounting needs. We are evaluating a centralized computing center, tying together the needs of our large integrated plant at nearby Painesville with our Cleveland operations. — JAMES P. MASON, *Manager, Systems & Services,* Diamond Alkali Co., Cleveland.

Continually Update Machines

We have automated many of our office procedures over the years and are putting considerable effort into further automation. We are never satisfied that we have even begun to approach the heights we are shooting at and a lot of solid thought is being put into this problem, from management level right straight down, all the time.

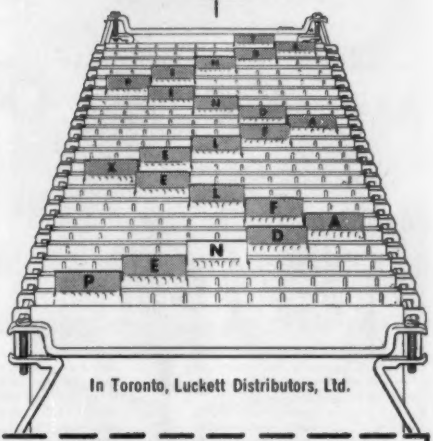
We have been using IBM's 650 setup

Trade your PANIC button for PENDAFLEX®

Never again need the sound and fury of an impatient boss rock the office corridors! With the speed and efficiency of Oxford Pendaflex hanging, sliding folders, "must-have-immediately" letters are *always* at your finger tips. Finger-Tip Control we call it . . . and it not only saves time, but cuts office costs as well. Accuracy? It's built into Pendaflex with exclusive "Keyboard" selection!

Mail the coupon. You'll receive—FREE—a File Analysis Sheet, full Pendaflex details and a complete Oxford Catalog.

Oxford Filing Supply Co., Inc.
Garden City, New York.



In Toronto, Luckett Distributors, Ltd.

Oxford
FIRST NAME IN FILING

OXFORD FILING SUPPLY CO., INC.
15-3 Clinton Road, Garden City, N. Y.

Please send free File Analysis Sheet and complete Oxford Catalog with all the facts about Pendaflex.

NAME .....
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CITY .....ZONE .....STATE .....

For More Information Circle No. 359

Fer ya . . . not agin ya!

CARTER'S CARBONS

WEAR! Carter's can outride any other carbon in the territory . . . even on electric machines!

CLEAN! Carter's looks out for yore hands. Tries not to curl, wouldn't think of smudging. Keeps everything clean!

LOOKS! Carter's dresses each word in its Sunday best — every letter starched neat 'n crisp. Shucks, it's the purtiest typing in town!

Yep, Carter's Carbons work *for* you! So buy 'em today. You'll find them in one of these boxes at your favorite Stationer or Office Equipment Dealer.

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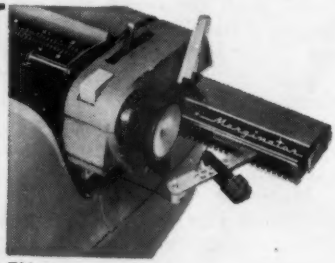
For More Information Circle No. 216

NOW! TYPING that looks like PRINTING —

at a fraction of the cost!

Inexpensive Typewriter Composition That Looks Like Expensive Typeset Printed Matter



Your "copy" CAN Look Like This

Now - your typewriter is more useful than ever. Anything that is now set up in type can be well reproduced with typewriter composition, and JUSTIFIED so that regular type-set printing is simulated. Regardless of the process of reproduction -- whether for a daily newspaper, an elaborate brochure, or a simple offset, mimeographed, or hektographed bulletin, the Marginator now offers you composition at greater savings than ever before possible. The two columns shown are IDENTICAL line for line. Compare them and see how perfectly the MARGINATOR evens up the right-hand margin.

Your "copy" Now Looks Like This

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Write for Free Illustrated Folder

MARGINATOR COMPANY, 1121 W. Magnolia Ave., Burbank, Calif.

For More Information Circle No. 217

for the past two years and find it a great improvement over the machines we used previously. Even though we have really just got the 650 program running smoothly, we are planning ahead two years and looking to the possibility of installing the IBM 1400 series. Howard Croteau, manager of our tabulating department, tells me that a small insurance company, such as we are in comparison with some of the greats in the industry, has to be that much better than they are, especially machine-wise, to hold our own.

Our use and purchase of conventional office equipment and systems will go along about the same as it has in previous years except that we buy more electric typewriters than we used to and these are gradually replacing manuals. We are not using as many different kinds of forms, including single sheet, snap-out, continuous and standard tabulating forms, but have been successful in consolidating our forms and use larger quantities of a fewer number of forms—CLEON M. DOMINA, *Manager, Purchasing & Services Dept.*, Peerless Insurance Co., Keene, N. H.

"It doesn't have to make sense. It's company policy!"

Danger!
UNLABELED SAFE

Are you entrusting your precious records to an antique safe of the pre-label era? Danger! Danger! Any safe lacking an Underwriters' Laboratories label is likely to be an incinerator if a fire strikes. And 43 out of 100 firms losing their vital records in a fire never reopen. Be prudent! Get a Meilink A label safe. There is no safer safe in the whole wide world. See your Meilink dealer or write for folder to Meilink Steel Safe Company, Oakwood and Clinton, Toledo 6, Ohio.

with MEILINK SINCE 1898 it's for keeps

Most complete line of safes and insulated products

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Please send me your folders on Meilink safes and Hercules insulated steel files.

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For More Information Circle No. 376

Gardner's

Fine Line Retractable Pen features dyna-flow Top Action mechanism, sturdy pocket clip, wide metal band, All brass Extra Fine smooth-flo-ball point, Metal Protect-O-Point prevents ball wobble and provides for longer pen life.

Praised for Outstanding Performance and Economy by Accountants, Auditors, Bankers, Bookkeepers, Secretaries. For use on Ledger Cards, Visible Records, Charts, Figure Work, Fine Writing. Precision Engineered Extra Fine Ball Point, Formulabs® pre-tested quality ink flows smoothly, evenly. Jet Black, Red, Blue, Green ink.

And talk about Economy! We pay postage anywhere in U.S.A. Retail 39c each. Your NET cost is:
1 dz.—$3.25 Ink colors and pen styles may be assorted
3 dz.— 3.10 dz. as desired to earn better rate.
6 dz.— 3.00 dz. Audit Refill Cartridges 15c ea.—$1.75 dz.
Sample Pen 25c. 10-day money back guarantee.

GARDNER STAMP COMPANY
166 South Washington St., Wilkes-Barre, Pa.
For More Information Circle No. 314

THE PRINT-O-MATIC CO., INC.
724 W. WASHINGTON BLVD. • CHICAGO 6, ILL.
For More Information Circle No. 315

pick the proven profit line of shelf-service snapaparts

STOCK FORMS

ROGERSNAP BUSINESS FORMS
P. O. BOX 10425 DALLAS 7, TEXAS
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FEDRON
Platen Reconditioner

Wipe on FEDRON and restore typewriter and business machine platens to new, resilient, slip-proof condition. Cleans type too. Write for bulletin.

FEDERAL MINING & MFG. CO.
222 Kearny Ave. Jersey City, N. J.
For More Information Circle No. 317

Conveyor Tube System Speeds Order Handling

PHIL HIRSCH

A PNEUMATIC TUBE system to route messages from station to station automatically solved a distribution problem, more-or-less prevalent in many industries, for Charles Bruning Co., Mt. Prospect, Ill. Bruning is a manufacturer of diazo-type copying equipment and a wholesaler of a broad line of engineering supplies. The firm also produces the light-sensitive paper used by its Copyflex machines. The distribution problem arises primarily in connection with the latter activity.

There are so many sizes, weights, colors and types of Copyflex paper that Bruning sales branches can keep only limited supplies on hand. For the same reason, officials at company headquarters make it a policy to stock standard sizes and manufacture special items to order. Each week Mt. Prospect receives approximately 500 orders for Copyflex paper from the 20 sales branches it serves throughout the middle and southwest. All orders must be processed in minimum time because of the limited inventories maintained in the field.

At its former location, on Chicago's north side, Bruning used two messengers to transport mail, orders and

other interoffice paperwork among departments. "An excessive amount of time was required to get orders to the production department," reports office manager Jess Cullison, who is in charge of the operation. So, two years ago, when they moved to Mt. Prospect, the company installed a pneumatic tube system designed and built by the Lamson Corp., Syracuse, N.Y. "Orders for Copyflex paper now reach our production department in a small fraction of the time formerly required," Mr. Cullison reports. "Ten to 12% of all orders are now shipped the same day they're received. Before, less than 1% could be delivered to the shipping dock and dispatched in that time."

Altogether, the pneumatic tube system transports some 1200 orders a week. This figure includes orders for

IT'S VISIBLE

MODEL 41C CARBON COPIES NUMBERING MACHINE

Will make up to 12 good carbon copies.

WRITE FOR DETAILS

654321
Facsimile Impression

AMERICAN NUMBERING MACHINE CO.
ATLANTIC AND SHEPHERD AVENUES
BROOKLYN 8, NEW YORK
BRANCH—105 W. MADISON ST., CHICAGO 2, ILL.

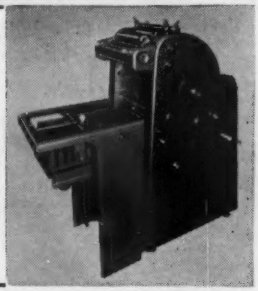
For More Information Circle No. 291

AUTOSTACKER
Increases Production of A. B. Dick Models 350 and 360 Offset Duplicators

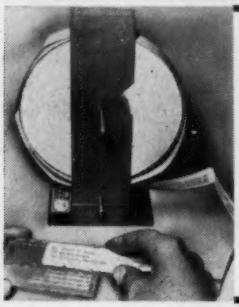
The dependable Autostacker increases duplicator receiving capacity to 10 reams—matching machine's feeding capacity. You avoid 9 interruptions in every run of 5000 copies. When run is completed, just move away the 5000 copies on dolly; put second dolly in place for next run. Low-cost Autostacker comes with 2 dollies, 4 paper control wheels, 4 chutes for envelopes, etc.; matches your duplicator. See Your A. B. Dick Dealer or Write for Literature.

Designed and Guaranteed by

GRISWOLD DUPLICATING PRODUCTS, INC.
30 Years in the Duplicating Field
2808 W. Temple St., Los Angeles 26, Calif.



For More Information Circle No. 292



Big Time-Saver

IF YOU USE ADDRESSOGRAPH PLATES IN FRAMES

QUIK-KARDS are shown at left. They save time MANY WAYS. Furnished in continuous perforated form like theatre tickets. Precision made. Fit your frames better than ANY card. You do not handle small, individual cards. No need to pick up the next card. It is already in your hand. Can't get out of order. Work flows faster and smoother. Send sample of card you use to show size and receive free samples of Quik-Kards. Write Addressing Machine Co. of Calif., 667 Mission St., San Francisco 5, Calif., YUkon 2-2130.

For More Information Circle No. 293

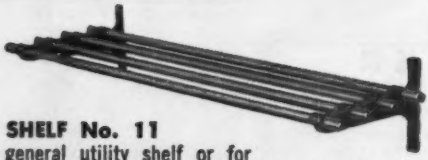
Decorator Line

Aluminum COAT and HAT RACKS

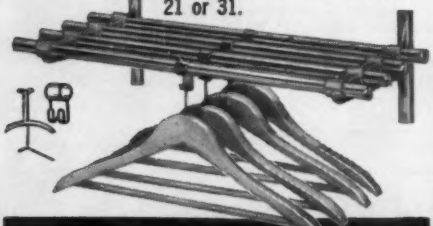
STYLED to harmonize with fine appointments, these smart wardrobe units are quality built of closed-end aluminum tubes rigidly held in cast aluminum brackets. Permanently beautiful in "clear" or "gold' anodized finishes. Mount at any height, on any wall—singly, end-to-end or in tiers, to give any desired capacity. Brackets adjustable to exact centers. Come in lengths by the even foot up to and including 8 feet.

SHELF No. 21
has full length Hanger Rail extending 11⅝" from wall.

SHELF No. 31
has staggered, die cast, anchor-style coat hooks instead of Coat hanger rail.



SHELF No. 11
general utility shelf or for extra hat shelf above types 21 or 31.



NEW SHELF No. 51
Compact space saving design with four Y-18 hangers which mount in special Y receptacles parallel to wall.

Write for Bulletin DL-10

VOGEL-PETERSON CO.
Rt. 83 and Madison St. • Elmhurst, Illinois

For More Information Circle No. 355

Copyflex machines and engineering supplies. "Expediting all three types of orders," reports Mr. Cullison, "has enabled us to stave off complaints from customers, and has also made it possible for our headquarters office to establish better relations with sales branch personnel."

Bruning's tube system also handles mail, interoffice memos, all internally distributed media except a relatively small volume of bulky magazines and catalogs which the company receives.

The tubes have made themselves particularly useful by expediting movement of rush orders which arrive at irregular intervals throughout the day by telegram, leased wire or phone. Formerly, most such orders, after they were readied for filling, lay in a basket awaiting a messenger on her regular rounds. As a result, a sales branch too often didn't receive the shipment by the date requested. In some cases, of course, order department personnel carried the order to the stockroom themselves, but the substitute messengers weren't always

The pneumatic tube system has enabled Bruning to ship 10-12% of all orders the same day they are received.

CONTOURAMATIC MARK III . . .

the all new photocopier with exclusive

PRESSURE FLOW

How much **faster** and **easier** the new CONTOURAMATIC Mark III Photocopier with PRESSURE FLOW does **all** your paperwork! One simple control activates the processing mechanism; the machine is ready to operate at **any** time. No messy chemicals to mix — disposable sealed plastic cartridge prolongs fluid life, changes in seconds. The CONTOURAMATIC Mark III copies **every** mark on paper . . . makes photo-exact, permanent black & white copies up to 12" wide by any length of anything written, drawn, photographed or stamped — in any color!

For More Information Circle No. 202

F. G. LUDWIG, Inc.
a subsidiary of Anken Chemical & Film Corp.
711 Coulter Place
Old Saybrook, Conn.

☐ Please send FREE brochures.

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For More Information Circle No. 313

Copies of change orders are prepared on a Copyflex machine and then dispatched via tube to proper department.

available and, even when they were, their regular work usually had to be interrupted.

Explains Mr. Cullison, "Virtually all such requests now are filled the same day they come in; before, the shipment seldom left our plant until the next day. Orders for certain items which we stock — such as duplicating machine parts and engineering supplies — now can be received late in the afternoon and still leave our plant that night. Be-

Shipping supervisor dispatches receiving tickets to production department where items needed are checked off and tickets returned, preventing shortages.

fore, such speed was almost impossible because our messenger service couldn't move quickly enough."

Often, he adds, changes come through on an order that's in process of being filled. The quantity may be altered, for example, or maybe the sales branch will ask them to ship directly to the customer. In such a situation, the order department prepares, on a Copyflex machine, several duplicates of the change - order and sends them to the departments involved via pneumatic tube. "This beats our former system in a number of ways," reports Mr. Cullison. "It's faster and there's no need to take order department personnel away from their regular work if, as often happened before, the messenger doesn't show up soon enough."

Having a speedy mechanical messenger available at all times also expedites mail handling at Bruning's headquarters. Officials now receive letters up to an hour earlier, and answer up until 4 p.m. when mail room closes. This is well after the last messenger pickup under the former system.

"More correspondence gets answered the day it's received," says Mr. Cullison. "The time which the tube system gives us in the afternoon for answering correspondence is valuable since we don't like to ask secretaries or other

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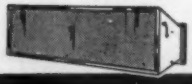

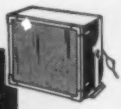

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employees to drop company mail in outside mailboxes on their way home."

The pneumatic tube system also expedites receiving operations. When a shipment arrives from a supplier, several copies of the receiving ticket are prepared on a Copyflex and sent, via tube, to the departments involved. The using department checks off items needed immediately and returns the form to the shipping dock via tube, so these items can be delivered first. Receiving personnel spend less time hunting for items needed in a hurry. Using departments run out of supplies and production materials less often.

Bruning's pneumatic tube system connects 11 points throughout the plant and office; most important the mailroom and adjacent order department, "national warehouse" (where stocks of

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engineering supplies are shelved), Copyflex paper and machine production departments; shipping, receiving and purchasing departments.

Tube carrier measures approximately 12¾″ x 3″ and will take forms up to 8½″ x 11¼″ including magazines provided they aren't too thick. At one end of the carrier are two slip rings imprinted with a series of letters and numbers. Each message station is designated by a letter - number combination (A-0, A-1, A-2, B-0, B-1, etc.). The sender positions the slip rings properly and drops the carrier into the tube.

Electrical contacts in the tubes ahead of each sending-receiving station are contacted by copper bands on the carrier. When a given station code is set up by positioning the slip rings and the carrier reaches the proper station, a circuit is completed that deflects the carrier out of the tube. Thus, a message can be routed to any station in the system. Travel time, depending on distance between stations, ranges from one to five minutes. "By eliminating most of the need for messengers, we saved in payroll expense a substantial percentage of the tube system's capital cost," reports James A. Rominski, Bruning's manager of services. "The methods improvements have been more than enough to justify the remainder of the cost."

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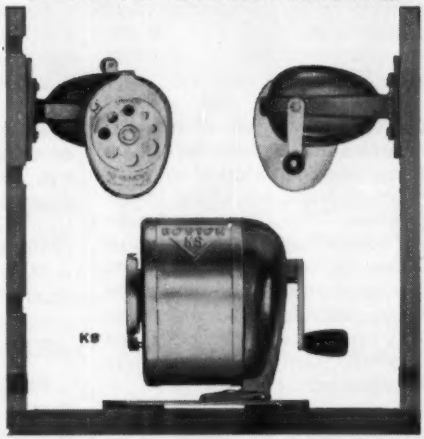

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For More Information Circle No. 357

News of the Office

Unions Vie for Office Workers

The Office Employees International Union protested to the AFL-CIO against attempts to organize clerical workers by industrial unions in the steel, automobile and other mass-production industries. The protest was set off by a report issued by Everett M. Kassalow, AFL-CIO research director, which said the most effective organizing drives for white-collar workers in large corporations could best be undertaken by establishing special divisions in production unions. Labor desires to offset declining economic and political strength due to inroads of automation among production workers by organizing clerical, engineering and technical workers. Thus, inter-union feuds are likely to become more bitter. The Office Employees International Union has a membership of only 65,000 out of a potential 16 million white-collar employees. A report by National Office Management Assn. shows that, of 2000 companies in the U. S. and Canada, only 6% have office staffs fully or partially organized.

Preauthorized Check Volume

Almost a million preauthorized checks are now being written each month by Life Office Management Assn. member companies and this is expected to double within two years, according to a survey by a LOMA committee headed by Russell Wetmore, Mutual of New York. A large majority of the 979,000 monthly preauthorized checks are written by a small minority of companies: 12 prepare more than 20,000 each. The committee developed a list of desirable features for machines to encode magnetic ink characters on the checks and will try to interest equipment manufacturers in developing high-speed machines with these features. The committee recommended that all companies, when responding to bank requests for MICR coding, inform the banks of the life insurance industry's efforts to get practical magnetic ink coding equipment.

Annual Microfilm Convention

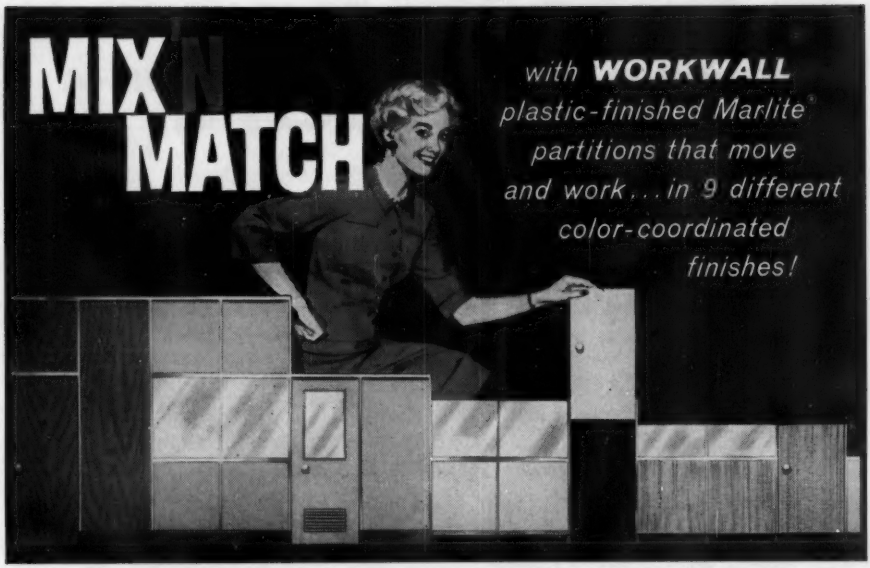
Richard S. Leghorn, president, Itek Corp., Waltham, Mass., will deliver the keynote address at the 10th Annual National Microfilm Assn. Convention in the Sherman Hotel, Chicago, April 4. His address, "Impact of Modern Technology on the Science of Graphic Reproductions," will open three days of talks and panel discussions on all fields of microreproduction. The program and more than 100 exhibits of microreproduction equipment is expected to draw an attendance of more than 1200.

AREA Annual Conference

Practical aspects of records management will be the theme of the 4th Annual Conference of the Assn. of Records Executives & Administrators, Hotel Roosevelt, New York, May 1-2, according to John Porter, IBM corporate records administrator and chairman of the meeting. The program will feature seminars on practical aspects of records management and an address on the specifics of records keeping.

AMA Purchasing Div.

A new division of American Management Assn. will be concerned with the management of more than $150 billion of purchases made annually by business and



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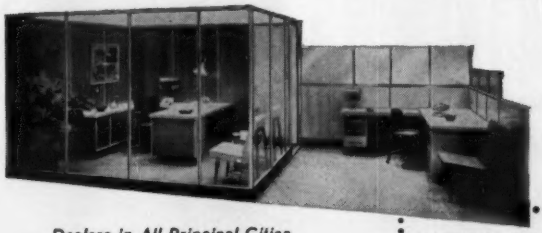

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High-speed quality production without devouring space . . .

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Goodkin's new Horizontal obeys every requirement for precision production of line and halftone work plus the first-step needs of Ektalith, Gevacopy and Xerography. Below are some of the key features. For the complete story, write us today.

- Requires just 60" x 25" of floor space; ideal for operation inside or out of darkroom
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Standard equipment: Lens, lights, timer and film holder. Priced slightly higher Denver and West.

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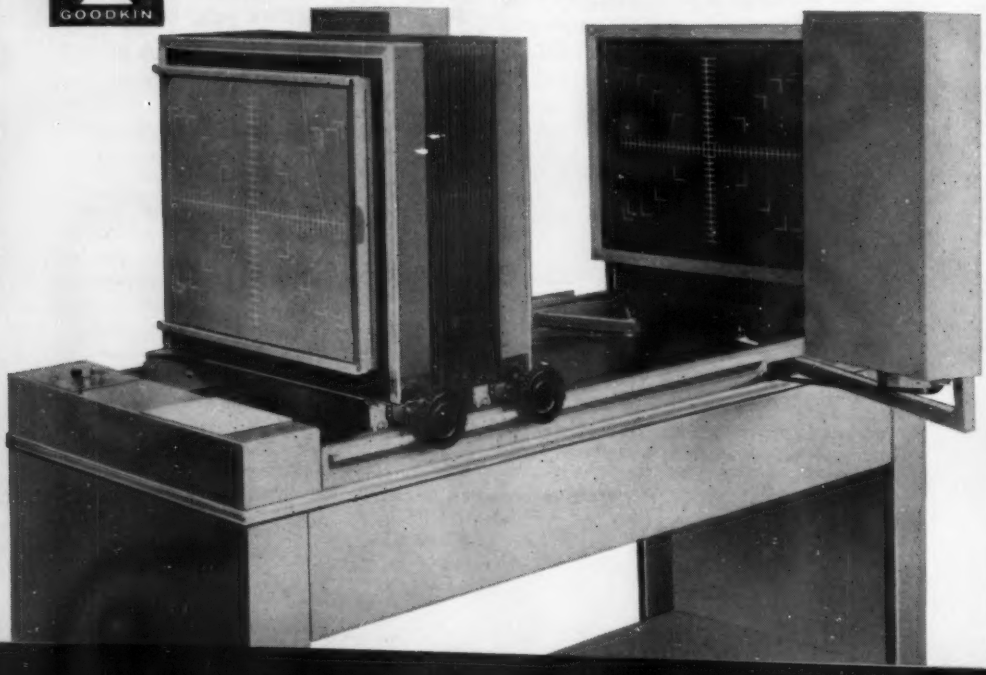

industry. This Purchasing Div., which will present more than 50 seminars in 1961, is headed by Andrew M. Kennedy Jr., vice president, purchasing and traffic, Westinghouse Electric Corp., who will preside over a planning council of 25 executives in the purchasing field. David J. Secunda, AMA vice president and general manager for program, said it was the first division to be formed by AMA in five years.

Unhappy Prediction?

The continuing revolution in office design, equipment and techniques may eliminate the private secretary in the next several years, ruefully predicts Godfrey Dallek, president, Dallek Design Associates, who explains it this way: Sharply rising rental costs in Manhattan and other office centers place an increasing premium on the efficient use of office space. Secretarial pools require far less space than individual allotments for each private secretary. The need for proximity between executive and secretary, which used to be a requisite of office design, is fast diminishing. The use of dictating and transcribing equipment will take over from shorthand and Stenotyping. Push-button telephoning, probably with built-in protection against unwelcome callers, will reduce the need to have a girl within shouting distance. Conveyors could take over the function of filling the in-box and emptying the out-box.

Widening Use of Computers

The medical profession is beginning to use digital computers to gather data on patients, it was reported at last month's winter meeting of American Institute of Electrical Engineers in New York. In a system created for the U. S. Air Force, physical chemistry of the entire human system is simulated on a computer, which covers 53 interdependent variables involved in human breathing and blood circulation. Attempts also have been made to design computer circuits to mimic some aspects of the processes of human thought. Last year saw a rapid expansion in the use of computers in industrial process control and other applications, according to another report. It was estimated that approximately 20 plants used digital computers last year, either to monitor production or guide and coordinate an overall production process. At Louisiana Power & Light Co., a digital computer was run day and night for six months to guide operation of a power plant. The computer was idle, for maintenance and related reasons, less than 1% of the time. Use of digital computers is most extensive in the petroleum and chemical industries, with electrical, steel and other heavy industry as runners-up.

Government Accountants to Meet

The tenth annual national symposium of the Federal Government Accountants Assn. will be held May 18-20 at the Hotel Shoreham, Washington, D. C. Charles A. Phillips, director, data systems research staff, Department of Defense, is chairman. "Changing Dimensions of Financial Management" will be the theme, and top government financial administrators will discuss new concepts in managerial equipment. Daytime technical sessions and exhibits will be open to the public.

Unemployment Tax Rise

The rise of unemployment has brought employment tax increases to employers, the Commerce Clearing House, Chicago, reported. States requesting higher rates are: Alabama, Alaska, California, Colorado, Delaware, Florida, Idaho, Maine, Missouri, Nebraska, Nevada, New York, Oklahoma, Tennessee, Virginia and Wyoming. This announcement came as the Labor Dept. reported that national unemployment in January rose to 5,400,000, an increase of 850,000 over December. This amounted to 6.6% of the total work force. Some of the nation's largest cities have been added to the depressed areas list (cities with over 6% of the work force unemployed) including Los Angeles, Philadelphia, Cleveland, Baltimore, Kansas City and St. Louis. Detroit and Buffalo were among cities where up to 12% are unemployed.

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For More Information Circle No. 362

Employee "Goes Sour"

(Continued from page 18)

of standards, and then another, are applied to the job. Applying standards of five years ago to present job performance, or measuring an employee's job performance by unrealistic standards in a constantly changing environment, first very tight and then very loose, can make any job appear to have gone sour. If job standards are to be successful, several important factors and conditions must be met.

First, job standards must be scientifically engineered for the particular job, in a particular company and for a particular time. Job standards cannot be successfully borrowed unless all the conditions present in the first instance are duplicated in the second application. The effectiveness of job standards has been sabotaged by sloppy engineering, degrading the value of standards in the eyes of employees and management.

Second, management must give more than mere lip service to the importance of properly engineered job standards. Management must wholeheartedly endorse and boost the use of job standards, if employees are to accept them. A tongue-in-cheek endorsement of standards will not fool employees. Management's endorsement must be genuine.

Third, employees must be acquainted with job standards, sold on the fairness of standards, and encouraged to accept them. They must be sold, as well as told, of the purpose and value of the standards to each individual employee. Job standards must be permitted to

prove themselves in actual practice.

Finally, job standards must be kept current to be effective. Whenever the methods, materials or machines on a job are changed, standards may need to be adjusted to conform to the new conditions. At least, standards should be reviewed and evaluated against the changes. Permitting standards to lapse is a tacit admission to employees that management is not fully sold on the value of job standards.

Misapplication of Evaluation Tools. The right man may have been selected by management for a job, the methods and procedures may be correct for the

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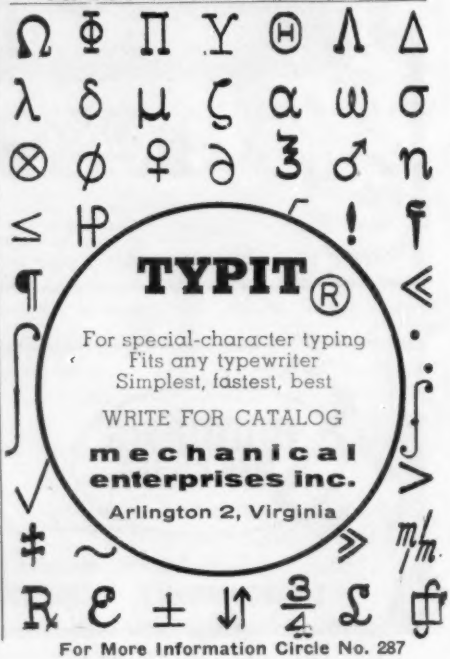

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For More Information Circle No. 287

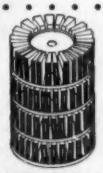
time, and scientifically engineered job standards may be available to measure the productivity of the employee—yet the job seems to sour. What's the answer? Maybe management has misapplied the evaluation tools and techniques.

Some common errors in the application of evaluation techniques are a lack of objectivity in rating employee productivity, bias, the halo error, favoritism, nepotism, prejudice and other equally odious mistakes of management.

"Miss Wackelbaum," complained the harassed office supervisor, "you have been here only two weeks and already you're one month behind in your work!" More than a little soul-searching is needed by a rater before he begins to evaluate the work of an employee.

An employee can go sour on his job, it is perfectly true, without any assistance from management or other employees. Supervisors should systematically analyze every instance lest an injustice be committed because of management errors. Poor selection, changing job methods, mirage job standards, outdated or inadequately engineered standards, and improper application of evaluation techniques can cause a job to go sour. Don't roll out the portable guillotine until you are sure the employee is to blame!

Dual Pedestal Desk


Book Rotor File

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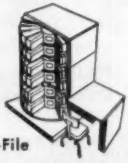
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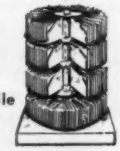
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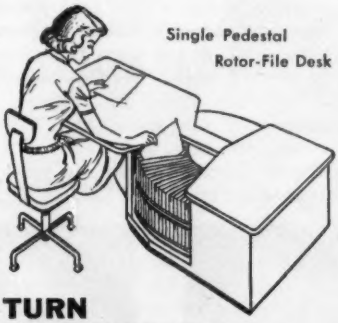
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Wassell revolving files bring the work to the clerk:
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And another big saving: Wassell Work Organizer revolving files *save up to 40% in floor space.* Send for your *free* literature on Work Organizers for the Sixties.

WASSELL ORGANIZATION INC.

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For More Information Circle No. 309

News of the Industry

Monroe Top Command Posts

Fred R. Sullivan, president, Monroe Calculating Machine Co., Div. Litton Industries, was named a senior vice president of Litton and, at the same time, elevated to the post of chairman of the board and chief executive officer of Monroe. The announcement was made by Charles B. Thornton, president and board chairman of Litton. Succeeding to the presidency of Monroe is Franklin B. Lincoln, Jr., who

Fred R. Sullivan

F. B. Lincoln Jr.

resigned as Assistant Secretary of Defense at the close of the Eisenhower administration. Mr. Lincoln also was appointed a vice president of Litton, Mr. Thornton said. Mr. Sullivan was a director and vice president of Litton since 1957, and will continue his headquarters at the Monroe administrative offices in Orange, N. J. He joined Monroe in 1934 and became controller in 1949. In 1951 he was elected a vice president, assistant to the president and a director, becoming president in 1953. Mr. Lincoln was chief fiscal officer in the Department of Defense and financial advisor to Secretary Gates. On Jan. 17 he was awarded the Department's Distinguished Public Service Medal.

Marketing Vice President

Carl P. Ray

Appointment of Carl P. Ray as vice president of marketing for Royal McBee Corp. was announced by Fortune Peter Ryan, president. He succeeds H. Carl Davis, who was senior vice president of marketing. Mr. Ray joined Royal McBee in 1959 as administrative assistant to the president, following 21 years of executive experience in the business machines industry. Later that year he was elected vice president, sales, and in 1960 became vice president—subsidiary operations. Mr. Davis is retiring after 32 years with the company, in which he rose from sales representative to president of McBee Co., and then to senior vice president of Royal McBee. He is a member of the Royal McBee board of directors and executive committee.

National Fiberstok Buys Morris

National Fiberstok Corp. announced that a group headed by Edward L. Howard, president, has purchased the Bert M. Morris Co., Los Angeles, 21-year-old manufacturer of plastic pen sets, ballpoint pens, letter trays, memo pads and Morrisharp electric pencil sharpeners. Bert M. Morris Co. will warehouse National Fiberstok fiber envelopes, binders, folders, and handle sales in the west; Morris products will be warehoused at National

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EXCLUSIVE FEATURE: 1-piece leg bracket

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Our Golden Rule

"...unmeasured service to a distinguished list of customers."

We are proud that the superior quality of our products has earned us the friendship of so many fine firms, and we take extra pride in meeting their special requirements with care and promptness.

We at Colonial will be happy to discuss *your* special requirements ... may we hear from you?

Specialists in the manufacture of spirit master units, spirit carbon, hand cleansers and fluids.

Colonial Carbon Company SKOKIE, ILLINOIS

Serving the wholesale trade exclusively

Fiberstok in Philadelphia and sold by its sales organization in the east. Mr. Howard, who will serve as president of the Morris company, stated that sales forces of both firms will be enlarged, new products developed. L. C. Owen, was elected operating vice president of Bert M. Morris Co.; Lee Schaeffer, long associated with Morris, will continue in sales administration.

Geloso Sales Manager

S. P. Bland

S. J. Spector, president, American Geloso Electronics Inc., announced the appointment of S. P. Bland as general sales manager. He will direct the marketing and sales of the complete line of Geloso StenOtape Dictating Machines, Tape Recorders, Transeophonic Intercoms and the new Remote-Tape. Mr. Bland comes to his new position from Remington Rand where he served 11 years in various marketing and sales capacities, including national dealer sales management.

Keller Heads Coaters Assn.

Robert K. Keller, vice president, Keuffel & Esser Co., Hoboken, N. J., was elected president of the National Assn. of Blueprint & Diazotype Coaters. Also elected were F. John Cushing Jr., Cushing & Co., Chicago, vice president, and B. K. Elliott Jr., B. K. Elliott Co., Pittsburgh, treasurer.

Eberhard Faber Ad Manager

Eberhard Faber Pen & Pencil Co. named Russell H. Williams Jr., advertising and sales promotion manager, it was announced by John D. Horne, vice president in charge of marketing. Mr. Williams, who succeeds Harry E. Fischer, who was appointed sales manager of the newly formed Eberhard Faber Premium Sales Co., has been with Eberhard Faber approximately five years, as assistant advertising & sales promotion manager. Thomas A. Walsh was promoted from advertising production manager to assistant advertising manager.

Litton Buys A. Kimball Co.

Acquisition of A. Kimball Co., manufacturer of point-of-sale punch-marked tags and related equipment, by Litton Industries was announced jointly by Fred Sullivan, chairman of the board and chief executive officer of Monroe Calculating Machine Co. Div. of Litton, and George R. Brown, president, United Shoe Machinery Co., Boston, of which Kimball was a subsidiary. Mr. Sullivan said this will expand Monroe's line of point-of-sale equipment systems which includes Monroe/Sweda Cash Registers. United Shoe will continue to make the basic punch marking machines for Monroe. Kimball's overseas business will be handled temporarily by United's subsidiary companies pending a new marketing program by Monroe.

Goodkin Sales Post

Garold E. Sitts

M. P. Goodkin Co., Newark, N. J., announced appointment of Garold E. Sitts as regional sales manager for its line of projectors and process cameras for the office and graphic arts fields. Mr. Sitts will service customers and dealers in 15 eastern and midwestern states and eastern Canada. His background includes seven years as sales engineer with American Type Founders and as a marketing consultant to manufacturers in the electronics and chemical fields.

Recht Forms Coast Firm

William Recht, president, William Recht Co., New York, announced formation of Rexon Corp., 319 E. Washington Blvd.,

Los Angeles. The new corporation will distribute Rexon offset blankets, Kwik blanket fix, Veladamp roller covering and Rexite rubber stereotypes in California, Oregon, Washington, Arizona, New Mexico, Idaho, Utah and British Columbia under presidency of Carl A. Turk Jr., formerly of Ortman-McCain Co.

Smith-Corona Names Fuller

Morris C. Fuller has been appointed national sales manager, consumer products, western U. S., for Smith-Corona Marchant, Inc., it was announced by Leslie C. Overlock, vice president, marketing. Mr. Fuller was sales manager of the former portable typewriter division. He joined the company in 1947, later became district manager for the Spokane area. In 1948 he was the first wholesale salesman for the western region, and in 1951 he took over wholesale sales in the Los Angeles area. From 1955-58 he was branch manager in Dallas.

Univac Promotions

F. M. Hoar

Frederick M. Hoar was named director of advertising and public relations for the Univac Div., Sperry Rand Corp., and will be responsible for all media advertising, press relations, house publications, audio-visual aids and business show participation, according to Gordon Smith, director of marketing. Mr. Hoar was formerly director of publicity and promotion at Burroughs Corp. and prior to that was west coast public relations representative for Burroughs and public relations manager for its ElectroData Div. Harold R. Hungerford was named assistant director of marketing for the Univac Div., Sperry Rand Corp., to supervise field sales organization, industry

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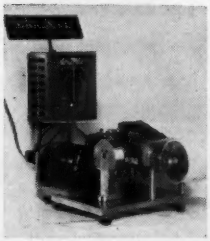
marketing group and Univac service centers. He joined the company in New York in 1927 and was branch manager in several cities. Since 1959 he has been advertising and sales promotion manager for the Univac Div.

Foto-Graphic Products Moves

Foto-Graphic Products Co., Minneapolis, is now a division of Charter Design & Mfg. Corp., and located with its parent organization. Lawrence Zamor, formerly president of Foto-Graphic Products and now president of Charter Design, announced appointment of Gene Koblas as manager of the Foto-Graphic Products Div. The move by Foto-Graphic Products was made in order to expand. As a division of the larger firm, it will manufacture new products in addition to its Foto-Riter Typesetter.

GE Computer Dept. Expands

General Electric's computer department announced plans for a $4 million addition to its manufacturing and headquarters facility in Phoenix, Ariz. The expansion will add approximately 190,000 sq. ft. to the existing 204,000 sq. ft. manufacturing and administrative building. The present building is an L-shaped structure. The addition will square off the existing building, giving overall dimensions of 432 ft. deep by 648 ft. wide and include cafeteria expansion. Occupancy is expected the end of the year.



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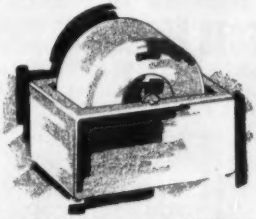
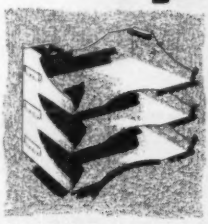
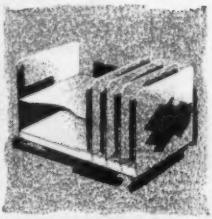
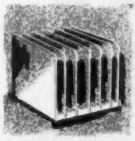




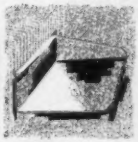
"Build Up" Horizontal Desk Tray. In letter and legal sizes; colors.



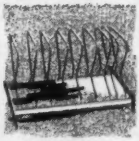
Flexible Steel Kleradesk —Model D. Occupies minimum desk space.



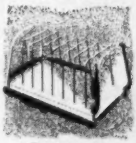
Flexible Steel Kleradesk — Model 6V



File-A-Sist Speeds Filing



Adapto-Rack Sectional Organizer



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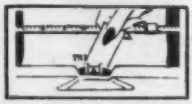

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EVER-SAFE TABULATING CARDTRAYS —

Desk High — Stores 26,400 Tabulating Cards

FIRE PROTECTION—For irreplaceable TABULATING CARDS—ONLY Ever-Safe Tabulating Card Trays can be stacked two high and two wide (4 Trays per drawer) in our Underwriter's Class C or D Insulated Legal Size Filing Cabinet.

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Intricate, Accurate, Economical SPECIALTY Multi-Part Business Forms

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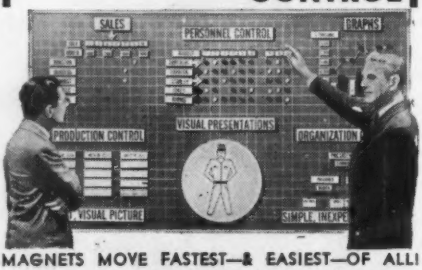

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For More Information Circle No. 321

More than 600 business executives from the northeast attended an open house to celebrate the 50th anniversary of Monroe Calculating Machine Co., Orange, N. J. Visitors saw the largest collection of figuring, data processing machines and electronic devices ever assembled by the company. Here, Harry Wilkins (left), Monroe assistant accounting machine sales manager, explains the Synchro-Monroe Card Punch Verifier to Tung Sol Electric executives R. G. Callanan and Charles Falk.

Halverson Lease Plan

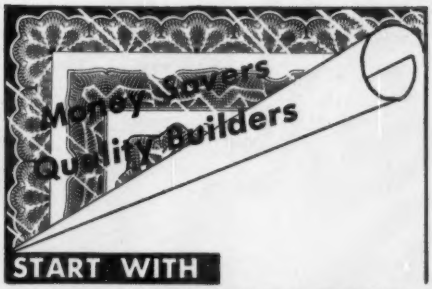
Halverson Products Co., 1051 N. Paulina St., Chicago 22, announced that its new electric automatic collator is available for $63.75 per month on a three-year lease plan. The Halverson eight-station collator works at a speed of 480 sheets per minute. It delivers complete criss-crossed sets, jogged and counted in the delivery tray. Additional information is available from the manufacturer.

Standard Products Elects Weber

William H. Weber was elected vice president of Standard Products Corp., it was announced by Fred Barning, president. Mr. Weber, formerly technical director, will direct the firm's research and development. In addition, he will supervise customer technical services.

Royal McBee Appointments

Royal McBee Corp. named Robert S. Miller as director of quality, products and services, to head a corporate-wide program concerned with total product reli-



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ability and service quality. The program, according to F. P. Ryan, president, is aimed at insuring continued customer satisfaction. With Royal McBee since 1947, Mr. Miller has served as customer service manager. He previously held the positions of secretary and assistant to the president.

Bunn Appointments

D. A. Gregory

An expanded research and engineering department has been established by B. H. Bunn Co., Chicago, manufacturer of tying machines. Heading the department is Douglas A. Gregory, vice president, who is observing his 42nd year with Bunn. Previous to his appointment as vice president, he was plant superintendent. Two other promotions were announced: George P. Hazard from machine designer to purchasing agent and assistant to the general manager. Joining the company was Bruce B. Wallace as plant manager.

Old Town Names Brown

Appointment of Morton A. Brown as midwest regional manager was announced by Old Town Corp., maker of carbon papers, inked ribbons, spirit duplicating machines and supplies. Mr. Brown was marketing manager of supplies for Underwood Corp. and for seven years prior to this general sales manager of Curtis-Young Corp.

Dallas Credit Conference

The 34th Annual Credit Conference of the Stationery, Office Furniture, School Supplies & Allied Industries will be held at the Statler-Hilton Hotel, Dallas, May 10-12. Speakers will discuss problems of timely interest and opportunity will be given for exchange of opinions. Willis F. Riley, Ennis Business Forms, Inc., Ennis, Texas, is chairman.

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Every Make - Every Model at

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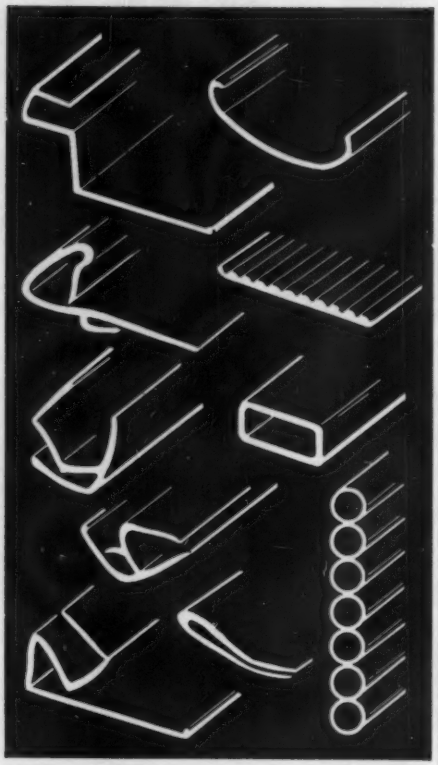
We design and make dies for extruded plastic protective transparent covers, holders, file tabs.



Consult with us on your requirements.

YATES COMPANY

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For More Information Circle No. 400

Delegated Authority

(Continued from page 160)

tem to do the work If the delegating authority feels it more practical to retain the authority at his level, or to delegate it to another department because of the "homogeneous grouping of work" concept, or some other reason, then the requester's problem is solved in that he is not charged with a responsibility he thought was his. In any event, the question has been resolved by the highest authority.

2. *Assuring Complete Accomplishment of Functions.* Is everything, that I am responsible for, being accomplished? To readily answer this question, one has but to ascertain whether he has redelegated all the authorities given him and then question those possessing the redelegated authorities as to the status of their functions.

3. *Organizational Analysis.* Have I assigned responsibility for accomplishment of functions logically according to homogeneous groupings and available skilled personnel? Also, are all assigned functional responsibilities actually contributing to direct work accomplishment or support? These questions can be answered by extracting the various delegations from the listing and placing them, as currently assigned, under each subordinate title, screening them in light of the question. It may amaze you how responsibilities for certain functions have been inappropriately assigned. These will figuratively pronounce themselves to you. Certain other functions will cause you to question their necessity.

4. *Personnel Appraisal.* How well

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SNIPPY A Handy Cutting Instrument

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Precision Inspections Faster With

MICRO-LITE*

NEW HI-EFFICIENCY 7-POWER
Illuminated MAGNIFIER

TRY 10 DAYS FREE!

Inspect Halftones On Press Or Printed!

Side Opening Provided for Corrective Tooling!

NOW make *precision* inspections of halftones or presswork *instantly, anywhere,* with this new self-illuminated 7-power MICRO-LITE Magnifier, especially designed for graphic arts craftsmen! Fine double-lens optical system. Brilliant, shadowless image, needle-sharp definition! Order from your graphic arts dealer, or if not available, sent postpaid on receipt of price, $9.95. Satisfaction guaranteed! *Dealers: Write us!*

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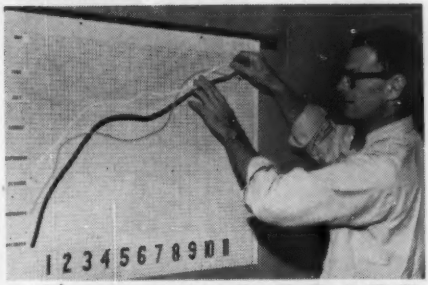

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- **Keeps** information where you can see it.
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- **Is fast** . . . easy to use.
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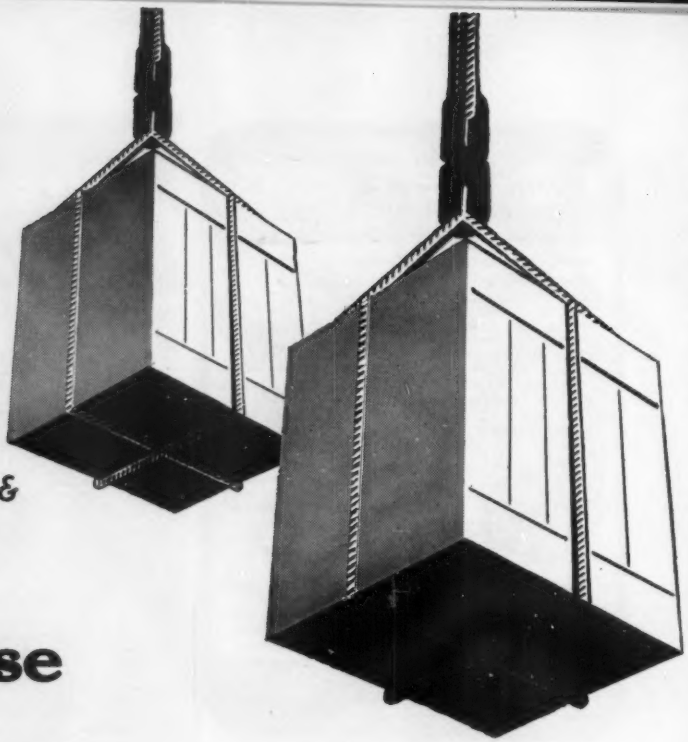

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are supervisory or staff persons performing? This is vitally important when considering people for advancement, and when fulfilling management's inherent responsibility of pointing out shortcomings to personnel. How better then can one conduct an appraisal than by using the listing as a check list?

5. *Staffing Requirements.* How many people does each department head need to accomplish assigned functions and tasks? To find the answer to this one, take all delegated responsibilities to a department head and break them out according to the individuals who are charged with portions of their accomplishment. Then, in conjunction with each individual's estimate, place an approximate annual time requirement on each function and task. Such computations are not necessarily 100% accurate, especially for staff people. They are, however, a good indicator as to overstaffing tendencies by would-be empire builders and poor planners. Staffing needs, when conducted in conjunction with the grouping and cutting of functions study mentioned in paragraph 3, can go a long way towards getting a streamlined organization best suited for accomplishing its work.

6. *Job Sheet Preparation.* How can job sheets be prepared to accurately reflect what people do? The answer to this is most important since, in most organizations, pay scales and grades are based on the skill and degree of responsibility exercised by the job incumbent. In preparing a job sheet there is always the danger of omitting important responsibilities, as well as including those which a person assumes to be his but which, in reality, have not been

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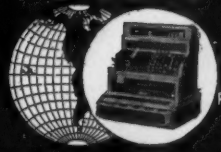
WORLD WIDE SERVICE



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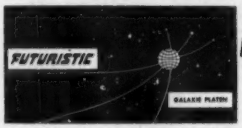

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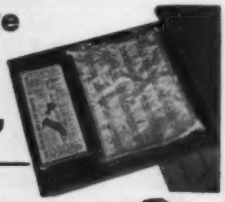

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delegated to him. Again, as in paragraph 5 above, he takes the mechanical listing prepared for himself and breaks it down into the segments allotted to his people. He should end up with the substantive material required for the preparation of accurate job sheets. If during the preparation of each job sheet it is found that a person has been doing a particular task not reflected in the List of Delegations, find out if the task was authorized to be done by some other person or department, and whether the function is worth doing. If authority for the function is not shown in the listing as belonging to your department, either your department has no business spending time on it, or the function has been wrongly assigned another department. In either case, the need for corrective action is evident. If the function is not deemed important it should be deleted from the job sheet and the employee told to cease doing that work.

7. *Methods Improvement.* Can the Listing of Delegations be used to help analyze and improve standard procedures? Not directly. However, when used to isolate and then consolidate all authorities relating to a given function, it may highlight unnecessary and duplicatory layers of coordination and approving authorities which tend to complicate and hinder administrative processes.

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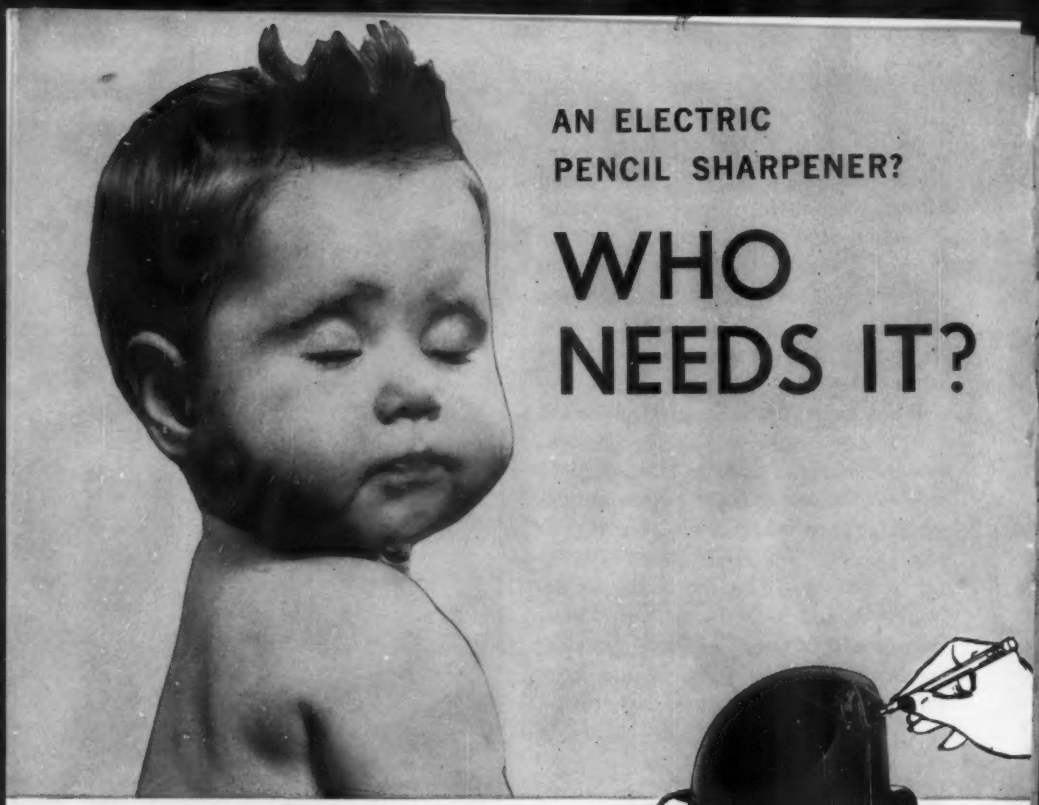

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National Conference & Exhibit Calendar

Office Management Assn. of Chicago, Conrad Hilton Hotel, Chicago, Feb. 27-March 2.

American Management Assn. Data Processing Conference, Statler Hilton Hotel, New York, March 6-8.

National Microfilm Assn., Sherman Hotel, Chicago, April 4-6.

Office Equipment Manufacturers Exhibits, Coliseum, New York, April 17-21.

American Society of Training Directors, Hotel Bellevue-Stratford, Philadelphia, May 1-5.

National Assn. of Educational Buyers, Chase-Park Plaza Hotels, St. Louis, May 3-5.

National Office Management Assn., Kiel Auditorium, St. Louis, May 8-10.

American Institute of Industrial Engineers, Sheraton Cadillac Hotel, Detroit, May 11-13.

Insurance Accounting & Statistical Assn., Biltmore Hotel, Los Angeles, May 14-17.

New York Stationery Show, New Yorker Hotel, New York, May 14-19.

Federal Government Accountants Assn., Shoreham Hotel, Washington, D. C., May 18-20.

National Society for Business Budgeting, Statler Hilton Hotel, Dallas, May 25-26.

National Assn. of Accountants, Waldorf-Astoria Hotel, New York, June 18-21.

National Office Machine Dealers Assn., Grossinger's Hotel, Grossinger, N. Y., June 18-21.

National Secretaries Assn., Biltmore Hotel, Los Angeles, July 19-22.

National Society of Public Accountants, Denver-Hilton Hotel, Denver, Aug. 28-Sept. 1.

Assn. for Computing Machinery, Statler-Hilton Hotel, Los Angeles, Sept. 5-8.

National Assn. for Bank Audit, Control & Operation, Conrad Hilton Hotel, Chicago, Sept. 11-13.

National Stationery & Office Equipment Assn., Conrad Hilton Hotel, Chicago, Sept. 23-27.

Life Office Management Assn., Shoreham Hotel, Washington, D. C., Sept. 25-27.

National Institute of Governmental Purchasing, Commodore Hotel, New York, Oct. 8-11.

Systems & Procedures Assn. of America, Cleveland, Oct. 9-11.

National Business Forms Associates, American Hotel, Bal Harbour, Fla., Oct. 23-26.

National Business Show, Coliseum, New York, Oct. 23-27.

American Institute of Certified Public Accountants, Palmer House, Chicago, Oct. 29-Nov. 1.

Society of Reproduction Engineers, Biltmore Hotel, Los Angeles, Dec. 2-5.

EVENTS ABROAD

Hanover Fair, Hanover, Germany, Apr. 30-May 9.

Institute of Internal Auditors, Queen Elizabeth Hotel, Montreal, Canada, May 21-24.

National Machine Accountants Assn., Royal York Hotel, Toronto, Canada, June 28-30.

Business Efficiency Exhibition, Olympia, London, Oct. 2-11.

Electronic Computer Exhibition, Olympia, London, Oct. 4-12.

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As We See It...

It is reported that Chrysler Corp., the nation's third largest automobile manufacturer, is firing 8000 of its 30,000 white-collar workers in a permanent cut aimed at saving as much as $60 million in salaries. Simple division shows that these 8000 office and clerical workers each represent $7500 per year in office costs, and a projection of this would indicate that white-collar costs at Chrysler might reach nearly one-quarter billion. (In addition, the corporation has laid off 10,000 of its 70,000 hourly production workers, although these are "temporary layoffs" until the current lag in sales is over.)

The reasoning behind the personnel cuts is that Chrysler has lost much of its 20% of the annual automobile market, down this year to nearly 11%. Chrysler officials believe that costs should be cut to fit the percentage of the market they sell, rather than the hoped-for percentage. Before the firings, Chrysler had a ratio of one white-collar worker for every 2 1/3 production workers. This now has been cut to one in approximately three—if the corporation rehires the full 10,000 production workers laid off, and if it can keep its offices functioning without having to rehire white-collar personnel.

Corporate cost-cutting often begins with office workers, even though many firms try to cut down by simply not refilling jobs that become vacant. Although its ratio of white-collar to production workers seems high, as does its average cost per worker, it will be interesting to note how successful Chrysler is in this attempt to reduce its office force by nearly 27% at one fell swoop.

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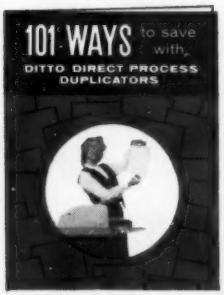

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